CATALOGUE OF GALAXIES AND OF CLUSTERS OF GALAXIES

VOLUME IV

F. ZWICKY E. HERZOG

CATALOGUE OF GALAXIES

AND OF

CLUSTERS OF GALAXIES

prepared by

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Volume IV

covering the Palomar survey fields

of the declination zones $+60^{\circ}$, $+66^{\circ}$, $+72^{\circ}$, $+78^{\circ}$, $+84^{\circ}$, $+90^{\circ}$

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FIELDS OF SURVEY ZONE +60°

FIELD No.	Survey Plate No.	Center of Field 1950.0 α	Center of Field 1950.0 δ	I.A.U. Galactic Coordinates λ	I.A.U. Galactic Coordinates β	Page No.
		h m	o '	o '	o '	
283	993	5 16	+60 00	151 07	+12 54	2
284	959	6 00	+60 00	153 52	+17 43	4
285	1264	6 44	+60 00	155 52	+22 53	6
286	1291	7 28	+60 00	157 01	+28 17	8
287	960	8 12	+59 30	157 50	+33 47	12
288	1296	8 55	+59 30	156 57	+39 12	16
289	703	9 39	+59 30	154 39	+44 30	20
290	962	10 22	+59 30	150 43	+49 15	24
291	712	11 06	+59 30	144 41	+53 21	28
292	723	11 49	+59 30	136 41	+56 17	32
293	1427	12 32	+59 30	127 03	+57 46	38
294	704	13 16	+59 30	116 37	+57 34	42
295	705	13 59	+59 30	107 17	+55 43	46
296	1425	14 42	+59 30	99 45	+52 31	50
297	755	15 26	+59 30	94 12	+48 12	54
298	1100	16 10	+60 00	91 16	+43 02	58
299	1414	16 53	+60 00	89 22	+37 52	62
300	1148	17 37	+60 00	88 44	+32 24	66
301	512	18 21	+60 00	89 11	+26 55	70
302	830	19 05	+60 00	90 34	+21 34	74
303	545	19 50	+60 00	92 49	+16 22	76
304	593	20 34	+60 30	96 10	+11 57	78

FIELDS OF SURVEY ZONE +66°

FIELD No.	Survey Plate No.	Center of Field 1950.0 α	Center of Field 1950.0 δ	I.A.U. Galactic Coordinates λ	I.A.U. Galactic Coordinates β	Page No.
		h m	o '	o '	o '	
305	973	3 37	+66 30	138 41	+ 9 09	80
306	1303	4 29	+66 00	142 56	+ 12 19	82
307	1246	5 22	+66 00	146 14	+ 16 39	84
308	677	6 14	+66 00	148 36	+ 21 26	88
309	686	7 06	+66 00	149 58	+ 26 34	92
310	1330	7 57	+65 30	150 48	+ 31 46	96
311	1286	8 48	+65 30	149 47	+ 36 58	100
312	708	9 40	+65 30	147 11	+ 41 58	104
313	662	10 31	+65 30	142 51	+ 46 14	108
314	977	11 22	+65 30	136 42	+ 49 32	112
315	674	12 13	+65 30	128 59	+ 51 29	116
316	717	13 04	+65 30	120 29	+ 51 50	120
317	1428	13 55	+65 30	112 20	+ 50 31	124
318	1575	14 46	+65 30	105 28	+ 47 44	128
319	1426	15 37	+65 30	100 23	+ 43 49	132
320	1410	16 29	+66 00	97 40	+ 38 52	136
321	745	17 20	+66 00	96 03	+ 33 52	140
322	550	18 12	+66 00	95 48	+ 28 35	144
323	1090	19 04	+66 00	96 45	+ 23 23	148
324	777	19 57	+66 00	98 48	+ 18 21	150
325	546	20 49	+66 30	102 08	+ 14 11	152

FIELDS OF SURVEY ZONE +72°

FIELD No.	Survey Plate No.	Center of Field 1950.0 α	δ	I.A.U. Galactic Coordinates λ	β	Page No.
		h m	o '	o '	o '	
326	1230	2 25	+ 72 30	130 10	+ 11 15	154
327	865	3 34	+ 72 30	134 47	+ 13 47	156
328	866	4 43	+ 72 00	139 00	+ 17 07	158
329	975	5 52	+ 72 00	141 49	+ 21 43	162
330	665	6 59	+ 72 00	143 13	+ 26 43	166
331	680	8 07	+ 71 30	143 40	+ 32 02	170
332	1325	9 13	+ 71 30	141 45	+ 37 01	174
333	685	10 20	+ 71 30	137 49	+ 41 21	178
334	714	11 26	+ 71 30	132 03	+ 44 25	182
335	1411	12 32	+ 71 30	124 56	+ 45 50	186
336	1341	13 38	+ 71 30	117 30	+ 45 22	190
337	1442	14 45	+ 71 30	110 51	+ 43 04	194
338	752	15 52	+ 71 30	105 56	+ 39 16	198
339	756	16 59	+ 72 00	103 36	+ 34 21	202
340	801	18 06	+ 72 00	102 38	+ 29 16	206
341	1149	19 15	+ 72 00	103 22	+ 24 00	210
342	809	20 24	+ 72 30	106 02	+ 19 21	212
343	772	21 33	+ 72 30	109 24	+ 15 18	214

FIELDS OF SURVEY ZONE +78°

FIELD No.	Survey Plate No.	Center of Field 1950.0 α	δ	I.A.U. Galactic Coordinates λ	β	Page No.
		h m	° '	° '	° '	
344	1213	0 05	+ 78 30	120 44	+ 16 06	216
345	1214	1 41	+ 78 30	125 41	+ 16 10	218
346	1226	3 17	+ 78 30	130 15	+ 18 02	220
347	1322	4 51	+ 78 00	134 11	+ 21 03	222
348	1256	6 23	+ 78 00	136 13	+ 25 25	224
349	1259	7 54	+ 77 30	136 55	+ 30 12	228
350	693	9 23	+ 77 30	134 53	+ 34 40	232
351	1326	10 52	+ 77 30	130 43	+ 38 06	236
352	1339	12 20	+ 77 30	125 03	+ 39 47	240
353	1374	13 49	+ 77 30	118 51	+ 39 25	244
354	768	15 18	+ 77 30	113 33	+ 37 02	248
355	1433	16 48	+ 78 00	110 39	+ 32 54	250
356	776	18 19	+ 78 00	109 28	+ 28 19	254
357	832	19 52	+ 78 00	110 23	+ 23 35	256
358	1232	21 26	+ 78 30	113 33	+ 19 49	258
359	1210	23 02	+ 78 30	117 37	+ 17 02	260

FIELDS OF SURVEY ZONE +84°

FIELD No.	Survey Plate No.	Center of Field 1950.0 α	Center of Field 1950.0 δ	I.A.U. Galactic Coordinates λ	I.A.U. Galactic Coordinates β	Page No.
		h m	o '	o '	o '	
360	568	0 06	+84 30	121 54	+ 22 00	262
361	1277	2 51	+84 30	126 01	+ 22 38	264
362	1328	5 24	+84 00	129 11	+ 25 05	266
363	692	7 52	+83 30	130 09	+ 28 59	270
364	727	10 12	+83 30	127 52	+ 32 21	274
365	1340	12 33	+83 30	123 33	+ 33 53	276
366	1363	14 52	+83 30	119 03	+ 32 56	278
367	775	17 16	+84 00	116 40	+ 29 37	280
368	802	19 45	+84 00	116 32	+ 25 48	282
369	1216	22 25	+84 30	119 30	+ 22 54	284

FIELDS OF SURVEY ZONE +90°

FIELD No.	Survey Plate No.	Center of Field 1950.0 α	Center of Field 1950.0 δ	I.A.U. Galactic Coordinates λ	I.A.U. Galactic Coordinates β	Page No.
		h m	o '	o '	o '	
370A	570	19 43	+90 00	123 00	+ 27 24	286
370B	567	22 31	+90 00	123 00	+ 27 24	288

INTRODUCTION

INTRODUCTION

In this fourth volume of the catalogue the material is presented again in the same arrangement as in Volumes I - III. For a detailed description the introductions to those volumes should be consulted. Only one minor deviation deserves to be mentioned here: For the objects with $\delta \geqq 80^{\circ}$ the Right ascensions are given to full minutes of time only, the decimals having been omitted as useless.

Precessions

Special attention is drawn to the two graphs at the end of this volume. They provide an easy way to determine the centennial precessions for all objects within these catalogues with the exception of a few clusters and galaxies near the pole.

Acknowledgments

The construction of this fourth volume has been supported primarily by a continued grant from the National Science Foundation. We also thank the California Institute of Technology and its Graphic Arts Facilities for their cooperation and support in the production of the catalogue.

SYMBOLS USED ON THE CHARTS

GALAXIES

■	$m_p \leq 11.0$	●	$13.1 \leq m_p \leq 14.0$
■	$11.1 \leq m_p \leq 12.0$	○	$14.1 \leq m_p \leq 15.0$
□	$12.1 \leq m_p \leq 13.0$	△	$15.1 \leq m_p \leq 15.7$

CLUSTERS OF GALAXIES

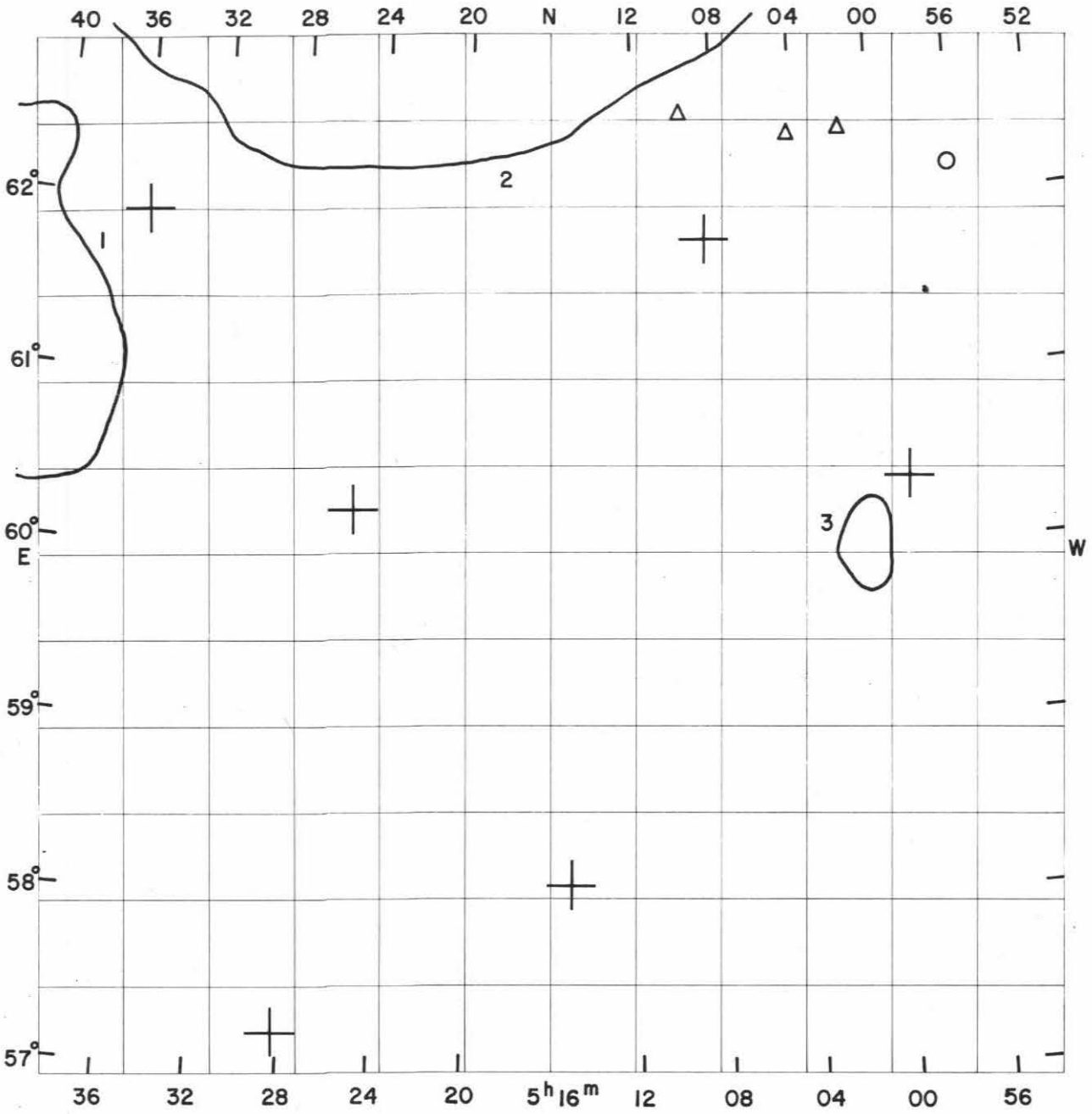
= Cluster No. 5 on the chart

GC STARS are marked by a cross: +

DISTANCES OF CLUSTERS

Near:		$V_s \leq 15{,}000$ km/sec
MD	= Medium distant:	$15{,}000 \text{ km/sec} < V_s \leq 30{,}000 \text{ km/sec}$
D	= Distance:	$30{,}000 \text{ km/sec} < V_s \leq 45{,}000 \text{ km/sec}$
VD	= Very distant	$45{,}000 \text{ km/sec} < V_s \leq 60{,}000 \text{ km/sec}$
ED	= Extremely distant:	$60{,}000 \text{ km/sec} < V_s$

CATALOGUE



FIELD No. 283

5^h16^m $+60^\circ00'$

Survey Plate No. 993

GC STARS

Nos.	R.A.	Decl.	m_p
	h m s	o ' "	
6136	4 58 57.6	+ 60 22 19	4.22
6345	5 08 27.5	+ 61 47 26	5.99
6478	5 15 08.7	+ 58 03 58	6.23
6741	5 25 22.0	+ 60 13 45	6.85
6814	5 28 16.6	+ 57 11 19	6.46
7015	5 35 50.7	+ 61 55 21	6.65

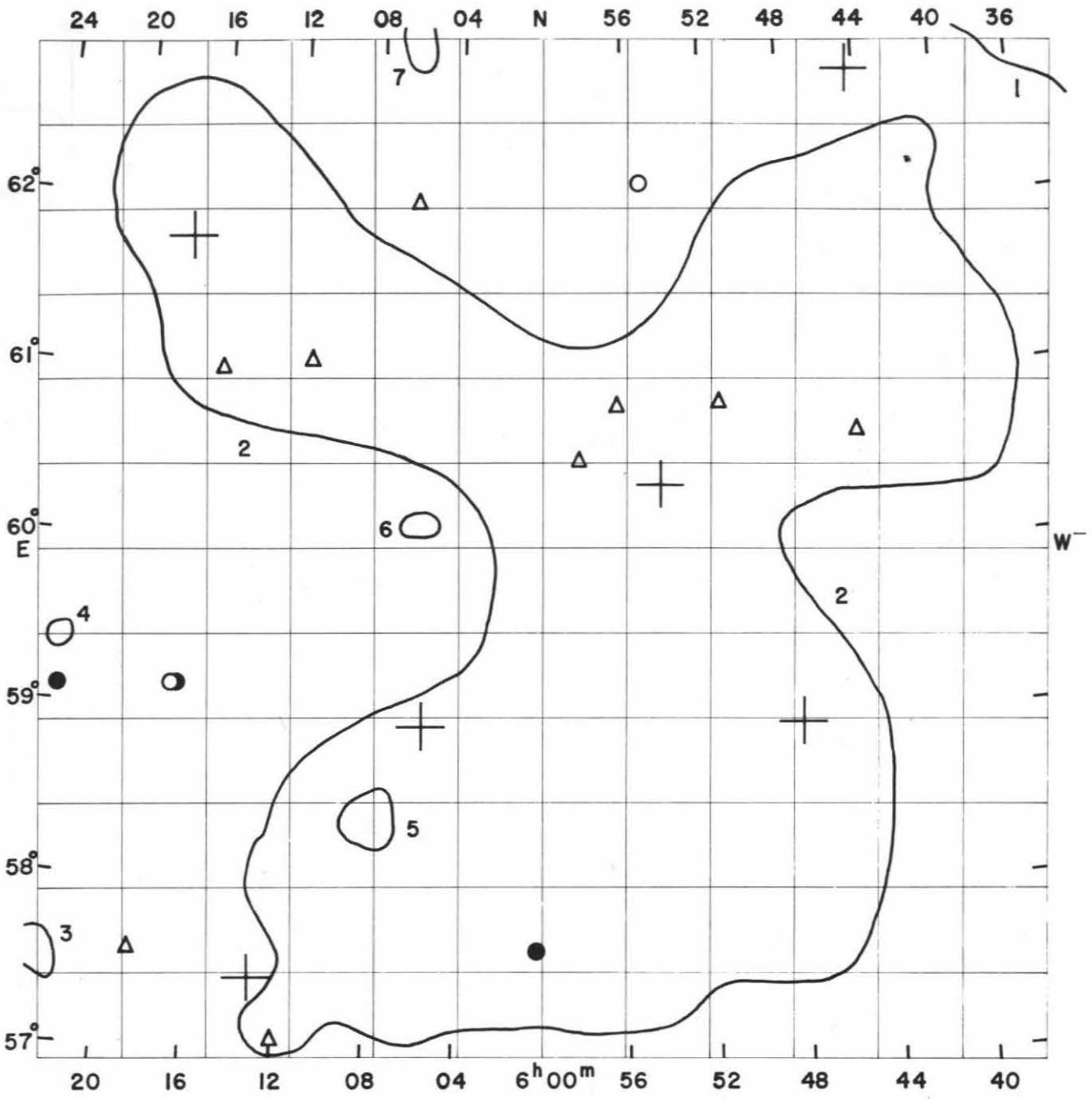
CLUSTERS OF GALAXIES

Cluster	Character	Population	Diameter in cm	Distance	Number on chart
0501.2 + 5959	medium compact	87	2.2	D	3
0521.2 + 6418	open	347	22.8	Near	2
0558.5 + 5951	open	310	24.5	Near	1

Average number of galaxies per cluster = 248.0

GALAXIES

Position α 1950 δ	NGC IC*	m_p	V_s km/sec	Remarks
h m o '				
4 56.1 +62 10		15.0		
5 01.6 +62 24		15.7		
5 04.1 +62 22		15.2		
5 09.6 +62 31		15.3		extremely diffuse spiral



FIELD No. 284

6^h00^m + 60°00'

Survey Plate No. 959

GC STARS

Nos.	R.A.	Decl.	m_p
	h m s	° ' "	
7236	5 44 21.5	+ 62 47 32	6.13
7327	5 47 52.7	+ 58 57 08	6.06
7497	5 54 15.4	+ 60 22 37	7.01
7796	6 05 34.4	+ 58 56 42	5.42
8007	6 13 05.7	+ 57 26 03	7.04
8140	6 17 30.4	+ 61 47 09	7.15

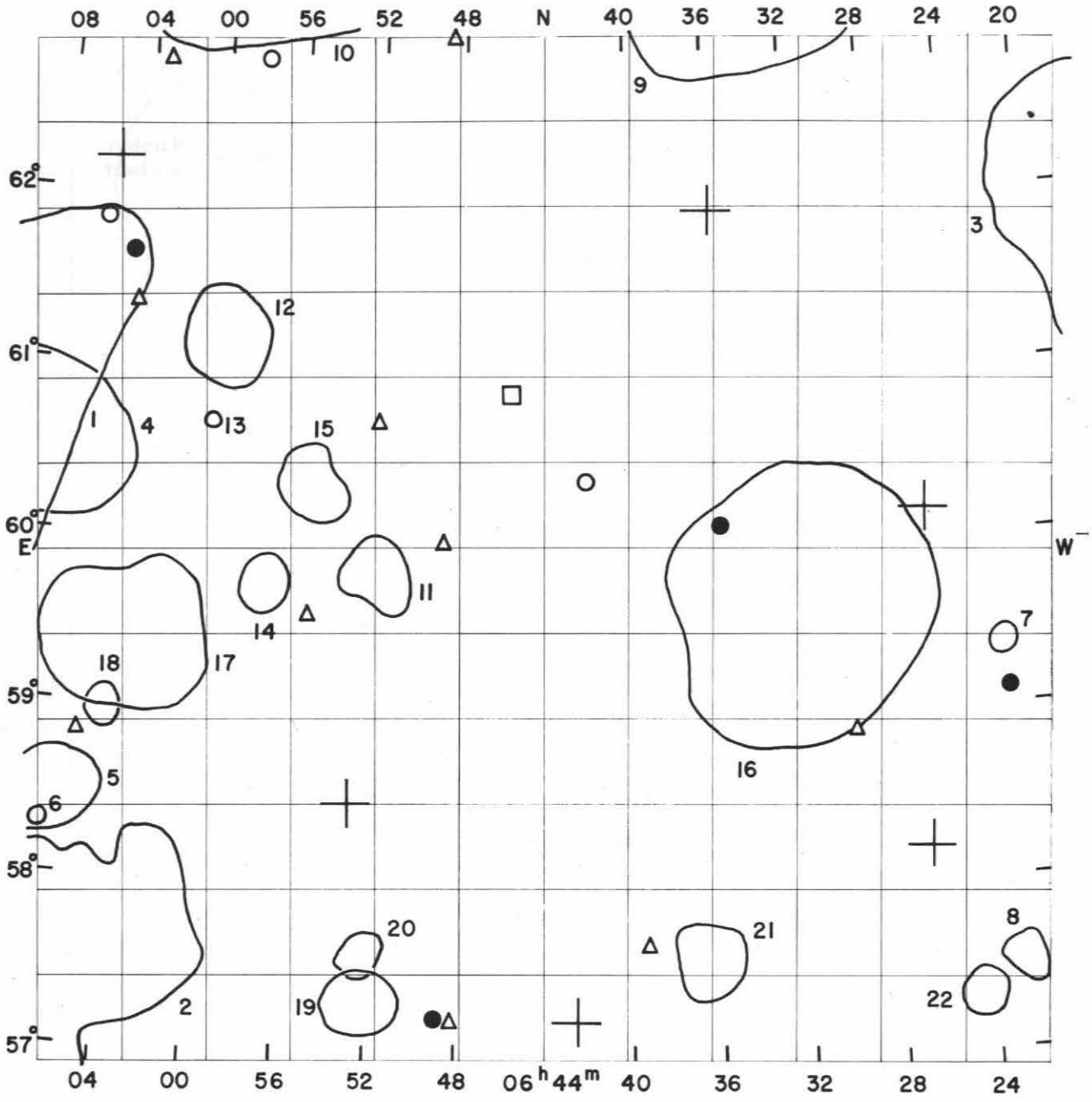
CLUSTERS OF GALAXIES

Cluster	Character	Population	Diameter in cm	Distance	Number on chart
0521.2 + 6418	open	347	22.8	Near	1
0558.5 + 5951	open	310	24.5	Near	2
0605.8 + 6007	compact	56	1.0	ED	6
0606.3 + 6258	open	56	1.4	ED	7
0607.9 + 5823	compact	59	1.8	VD	5
0622.6 + 5731	medium compact	48	1.4	ED	3
0622.6 + 5923	compact	57	0.8	ED	4

Average number of galaxies per cluster = 133.3

GALAXIES

Position α 1950 h m	Position δ 1950 o '	NGC IC*	m_p	V_s km/sec	Remarks
5 44.8	+ 60 39		15.7		multiple system
5 51.4	+ 60 50		15.6		very compact
5 55.1	+ 62 08		14.8		
5 56.4	+ 60 50		15.4		
5 58.2	+ 60 31		15.7		very compact
6 00.3	+ 57 39	2128	13.7		
6 06.2	+ 62 01		15.7		diffuse spiral
6 11.2	+ 61 05		15.6		
6 12.0	+ 57 04		15.5		
6 15.6	+ 61 00		15.7		
6 17.1	+ 59 08		13.9		} double system, contact
6 17.2	+ 59 08		14.1		}
6 18.5	+ 57 35		15.3		
6 22.5	+ 59 07	2166*	13.5		



FIELD No. 285

6^h44^m $+60^\circ00'$

Survey Plate No. 1264

GC STARS

Nos.	R.A.	Decl.	m_p
	h m s	o ' "	
8389	6 25 53.3	+ 60 10 48	6.72
8416	6 26 26.8	+ 58 12 07	5.96
8666	6 35 54.3	+ 61 58 07	6.55
8826	6 42 34.1	+ 57 13 25	5.47
9082	6 52 57.2	+ 58 29 27	4.54
9424	7 05 33.8	+ 62 13 02	7.6

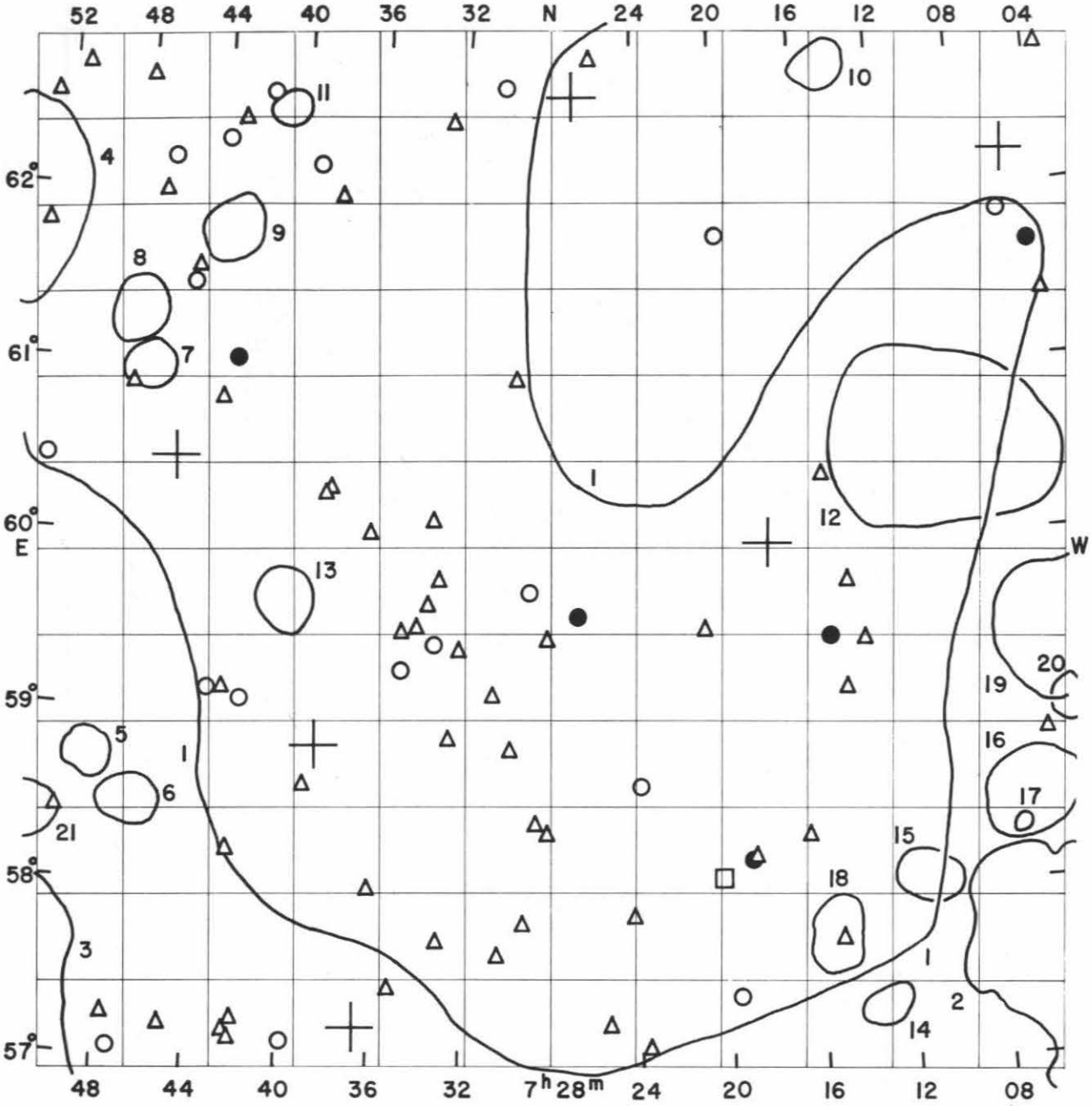
CLUSTERS OF GALAXIES

Cluster	Character	Population	Diameter in cm	Distance	Number on chart
0558.5 + 5951	open	310	24.5	Near	3
0622.6 + 5731	medium compact	48	1.4	ED	8
0622.6 + 5923	compact	57	0.8	ED	7
0624.6 + 5720	medium compact	57	1.4	VD	22
0631.9 + 5937	open	132	8.6	MD	16
0632.7 + 6323	medium compact	144	7.3	Near	9
0636.5 + 5735	medium compact	57	2.3	VD	21
0651.8 + 5950	medium compact	72	2.2	VD	11
0652.2 + 5720	compact	107	2.2	VD	19
0652.3 + 5736	compact	63	1.4	ED	20
0655.1 + 6020	medium compact	82	2.2	ED	15
0657.1 + 5945	compact	74	1.7	ED	14
0658.3 + 6320	compact	189	6.1	MD	10
0659.6 + 6111	open	104	3.1	VD	12
0700.0 + 6042	compact	35	0.4	ED	13
0703.4 + 5925	medium compact	151	5.2	MD	17
0704.3 + 5859	medium compact	52	1.3	ED	18
0704.8 + 5730	medium compact	208	7.4	D	2
0706.5 + 5830	medium compact	170	3.0	D	5
0706.9 + 5819	compact	55	0.6	ED	6
0709.8 + 6033	medium compact	140	6.6	MD	4
0733.4 + 6102	medium compact	1315	36.3	Near	1

Average number of galaxies per cluster = 164.6

GALAXIES

Position α 1950 h m	Position δ 1950 o '	NGC IC*	m_p	V_s km/sec	Remarks
6 22.5	+ 59 07	2166*	13.5		
6 29.7	+ 58 54		15.6		
6 35.6	+ 60 07		13.3		
6 39.4	+ 57 41		15.4		
6 42.0	+ 60 24		14.1		
6 45.6	+ 60 54	2273	12.5		
6 48.2	+ 57 14		15.7		extremely diffuse
6 48.7	+ 62 59		15.6		
6 48.8	+ 60 02		15.5		
6 48.9	+ 57 15		13.9		
6 52.0	+ 60 43		15.5		
6 55.2	+ 59 36		15.2		
6 58.2	+ 62 50		14.9		
7 03.3	+ 62 48		15.7		very faint streamers
7 04.1	+ 61 23		15.3		
7 04.5	+ 61 41		13.1		
7 05.5	+ 58 51		15.7		
7 06.0	+ 61 52		14.5		



FIELD No. 286

7^h28^m $+60^\circ00'$

Survey Plate No. 1291

GC STARS

Nos.	R.A.	Decl.	m_p
	h m s	o ' "	
9424	7 05 33.8	+ 62 13 02	7.6
9775	7 17 55.0	+ 59 59 50	6.28
10025	7 27 03.6	+ 62 36 28	6.77
10279	7 36 42.0	+ 57 11 57	6.20
10343	7 38 47.3	+ 58 49 47	4.96
10529	7 45 49.5	+ 60 28 06	6.70

CLUSTERS OF GALAXIES

Cluster	Character	Population	Diameter in cm	Distance	Number on chart
0703.4 + 5925	medium compact	151	5.2	MD	19
0704.3 + 5859	medium compact	52	1.3	ED	20
0704.8 + 5730	medium compact	208	7.4	D	2
0706.5 + 5830	medium compact	170	3.0	D	16
0706.9 + 5819	compact	55	0.6	ED	17
0709.8 + 6033	medium compact	140	6.6	MD	12
0711.2 + 5801	medium compact	81	1.8	VD	15
0713.5 + 5718	medium compact	70	1.4	VD	14
0714.6 + 6245	medium compact	78	1.5	ED	10
0715.4 + 5743	medium compact	76	2.0	VD	18
0733.4 + 6102	medium compact	1315	36.3	Near	1
0740.3 + 5940	medium compact	87	1.9	VD	13
0741.1 + 6230	medium compact	63	1.2	ED	11
0743.6 + 6148	medium compact	83	2.0	VD	9
0747.1 + 5826	medium compact	103	1.8	ED	6
0747.3 + 6058	compact	68	1.5	ED	7
0748.0 + 6117	medium compact	86	2.0	VD	8
0749.0 + 5842	compact	94	1.5	ED	5
0751.9 + 5819	medium compact	85	2.0	ED	21
0754.6 + 6155	open	146	5.3	D	4
0756.1 + 5616	open	430	16.8	Near	3

Average number of galaxies per cluster = 173.4

GALAXIES

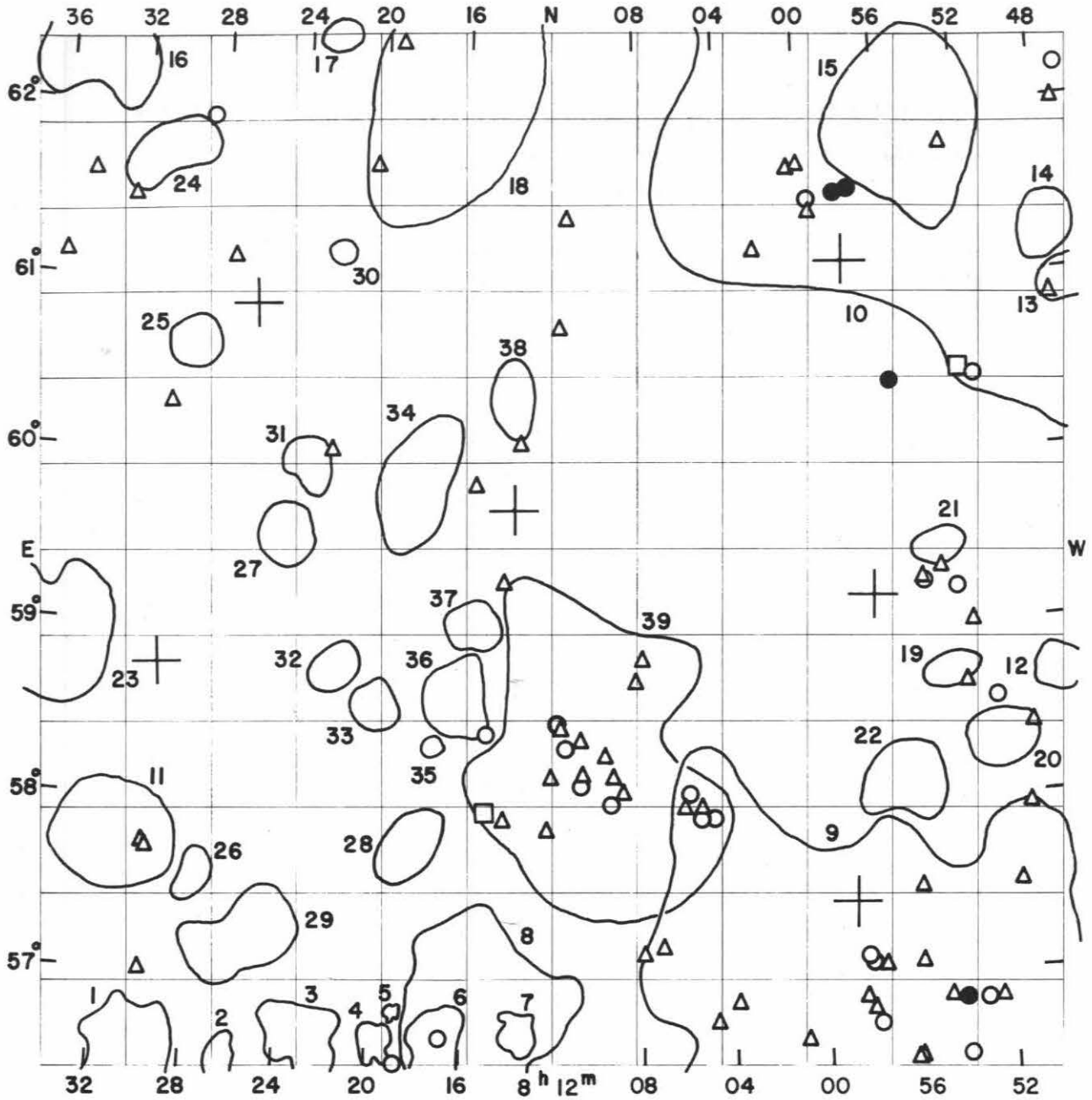
Position α 1950 h m	Position δ 1950 o '	NGC IC*	m_p	V_s km/sec	Remarks
7 03.3	+ 62 48		15.7		very faint streamers
7 04.1	+ 61 23		15.3		
7 04.5	+ 61 41		13.1		
7 05.5	+ 58 51		15.7		
7 06.0	+ 61 52		14.5		
7 13.6	+ 59 27		15.6		
7 14.4	+ 59 47		15.4		double system, halo
7 14.6	+ 59 10		15.4		
7 15.2	+ 57 43		15.5		
7 15.2	+ 59 28		13.3		
7 15.3	+ 60 24		15.7		double system
7 16.5	+ 58 19		15.5		
7 18.8	+ 58 13		15.2		compact
7 19.0	+ 58 11		13.4		
7 19.7	+ 57 25		15.0		
7 20.0	+ 61 47		15.0		very diffuse spiral
7 20.4	+ 58 05		12.7		
7 20.9	+ 59 31		15.5		compact
7 23.7	+ 57 06		15.6		
7 24.0	+ 58 38		14.2		
7 24.4	+ 57 52		15.5		diffuse spiral
7 25.4	+ 57 15		15.3		
7 26.3	+ 62 50		15.3		very compact
7 26.8	+ 59 36		13.9		
7 28.2	+ 58 21		15.7		
7 28.2	+ 59 28		15.6		
7 28.7	+ 58 25		15.6		

Position α 1950 h m	Position δ o '	NGC IC*	m_p	V_s km/sec	Remarks
7 29.0	+ 59 45		14.2		
7 29.3	+ 57 50		15.7		
7 29.7	+ 60 58		15.7		
7 29.9	+ 58 50		15.6		
7 30.3	+ 62 39		14.4		
7 30.4	+ 57 39		15.7		double system
7 30.6	+ 59 08		15.6		double system, halo
7 32.3	+ 59 25		15.4		
7 32.7	+ 58 54		15.2		compact
7 32.9	+ 62 27		15.3		double system, halo
7 33.0	+ 57 43		15.7		
7 33.1	+ 59 49		15.5		
7 33.4	+ 59 27		14.9		strong jets
7 33.5	+ 60 08		15.7		extremely faint jets
7 33.7	+ 59 40		15.5		
7 34.2	+ 59 32		15.6		
7 34.9	+ 59 17		14.9		
7 34.9	+ 59 30		15.4		two jets
7 35.2	+ 57 27		15.6		
7 36.2	+ 58 01		15.6		
7 36.5	+ 60 04		15.7		
7 38.3	+ 62 00		15.5		
7 38.4	+ 60 19		15.5		
7 38.6	+ 60 17		15.6		
7 39.3	+ 58 36		15.7		
7 39.5	+ 62 11		15.0		
7 39.8	+ 57 06		14.3		
7 41.9	+ 57 15		15.5		
7 41.9	+ 62 35		14.6		
7 42.0	+ 57 07		15.1		
7 42.2	+ 57 10		15.3		
7 42.2	+ 59 05		14.8		
7 42.6	+ 58 13		15.7		
7 43.1	+ 59 08		15.4		
7 43.2	+ 61 03		14.0		
7 43.4	+ 62 26		15.4		
7 43.7	+ 60 50		15.5		
7 43.8	+ 59 08		14.7		
7 44.1	+ 62 19		14.8		
7 45.1	+ 57 11		15.6		
7 45.3	+ 61 34		15.5		
7 45.4	+ 61 28		14.9		
7 46.8	+ 62 12		14.7		
7 47.1	+ 62 00		15.4		double system, bridge
7 47.3	+ 57 03		14.6		
7 47.6	+ 57 15		15.4		
7 48.1	+ 60 52		15.2		
7 48.2	+ 62 40		15.4		
7 50.3	+ 58 25		15.3		
7 51.5	+ 62 43		15.6		
7 52.0	+ 60 26	2209*	14.5		
7 52.9	+ 61 47		15.2		
7 53.0	+ 62 32		15.1		compact

An irregular area of about $1\frac{1}{2}$ square degrees, located between the southern edge of this field and fields Nos. 261 and 262 of Volume III, is not covered by any of these fields. It is outlined approximately by

$$7^h28^m \leqq \alpha \leqq 7^h51^m \ , \quad 56^o30' \leqq \delta \leqq 57^o00'$$

with a narrow spike extending westward along its northern boundary as far as Right ascension 7^h16^m. This area contains no galaxies bright enough for inclusion in this catalogue and only the contour line of cluster No. 3, field No. 286, runs through the eastern part of it to be continued as cluster No. 4, field No. 262.



FIELD No. 287

8^h12^m $+59^\circ30'$

Survey Plate No. 960

GC STARS

Nos.	R.A.	Decl.	m_p
	h m s	° ′ ″	
10809	7 57 10.0	+ 59 11 07	5.79
10846	7 57 58.3	+ 61 07 57	6.70
10864	7 58 32.2	+ 57 24 51	6.52
11252	8 13 42.1	+ 59 43 35	5.52
11593	8 26 07.7	+ 60 53 14	3.47
11688	8 29 54.9	+ 58 46 44	6.77

CLUSTERS OF GALAXIES

Cluster	Character	Population	Diameter in cm	Distance	Number on chart
0733.4 + 6102	medium compact	1315	36.3	Near	10
0747.3 + 6058	compact	68	1.5	ED	13
0748.0 + 6117	medium compact	86	2.0	VD	14
0749.0 + 5842	compact	94	1.5	ED	12
0751.9 + 5819	medium compact	85	2.0	ED	20
0754.0 + 5844	medium compact	105	1.4	ED	19
0754.1 + 5928	compact	81	1.4	ED	21
0754.6 + 6155	open	146	5.3	D	15
0756.1 + 5616	open	430	16.8	Near	9
0756.4 + 5805	open	151	2.5	ED	22
0810.1 + 5813	medium compact	141	8.6	Near	39
0813.3 + 5640	medium compact	105	1.3	ED	7
0814.0 + 6023	medium compact	46	1.9	ED	38
0814.8 + 5648	medium compact	102	5.6	Near	8
0815.6 + 5902	medium compact	61	1.7	VD	37
0816.3 + 5837	open	57	2.3	VD	36
0817.0 + 5635	medium compact	166	2.0	ED	6
0817.0 + 6207	open	122	6.6	MD	18
0817.4 + 5820	compact	53	0.6	ED	35
0818.3 + 5951	open	134	3.3	VD	34
0818.4 + 5746	open	86	2.1	VD	28
0818.8 + 5646	compact	48	0.5	ED	5
0819.6 + 5636	medium compact	86	1.2	ED	4
0820.0 + 5834	compact	69	1.5	ED	33
0821.9 + 5846	open	55	1.5	ED	32
0822.2 + 6113	compact	55	0.8	ED	30
0822.7 + 5635	open	134	2.3	VD	3
0822.7 + 6226	compact	69	1.2	ED	17
0823.4 + 5958	medium compact	78	1.6	ED	31
0824.3 + 5933	open	80	1.9	VD	27
0825.5 + 5711	medium compact	188	3.0	ED	29
0826.1 + 5630	compact	138	1.0	ED	2
0827.9 + 5731	medium compact	72	1.3	ED	26
0829.2 + 6040	medium compact	66	1.6	VD	25
0830.1 + 5634	medium compact	95	2.6	VD	1
0831.0 + 6145	medium compact	105	2.4	VD	24
0831.3 + 5745	medium compact	130	3.8	VD	11
0834.6 + 6219	open	97	3.6	D	16
0834.7 + 5854	medium compact	179	4.3	VD	23

Average number of galaxies per cluster = 137.9

GALAXIES

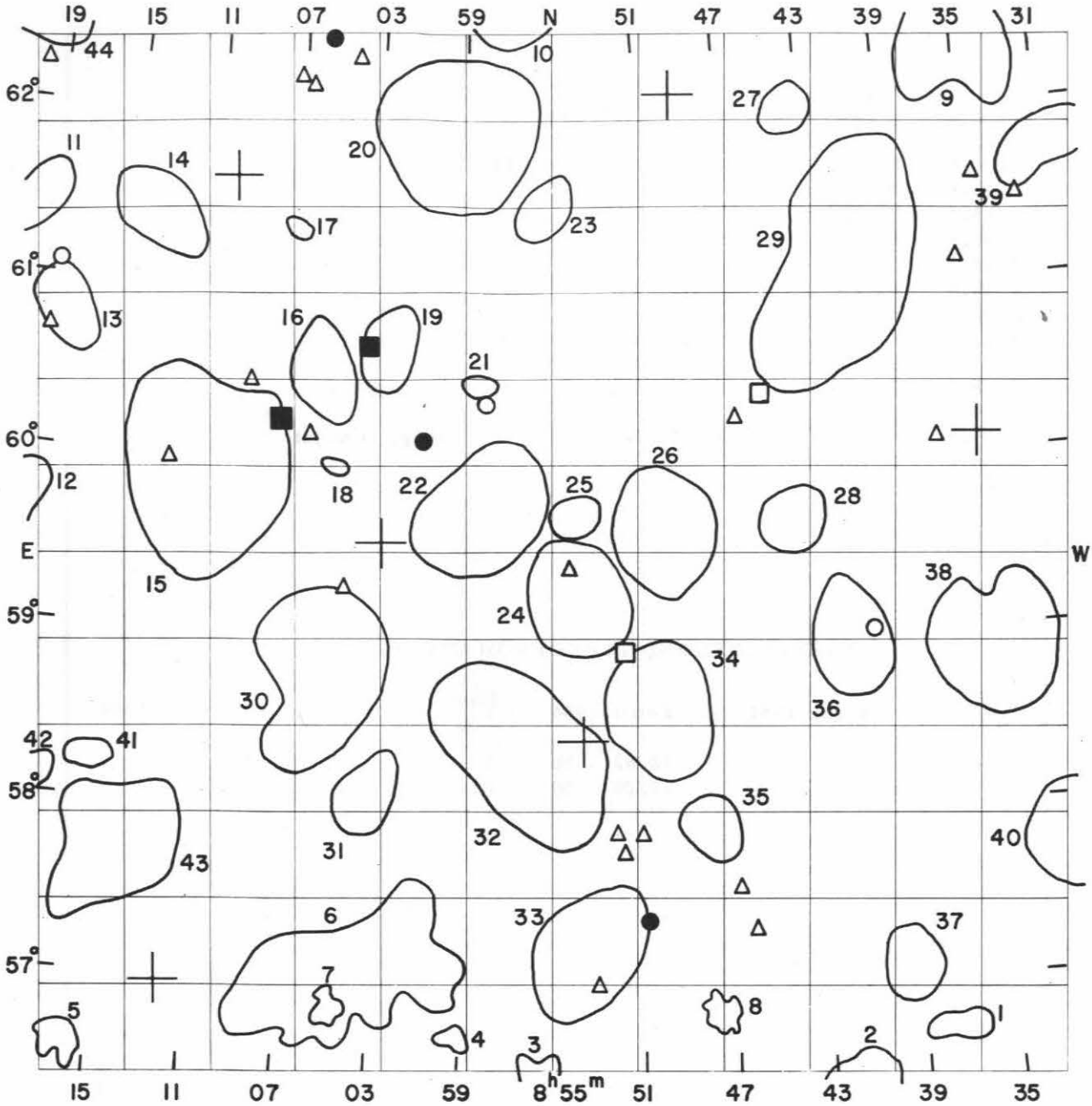
Position α 1950 h m	Position δ o '	NGC IC*	m_p	V_s km/sec	Remarks
7 46.8	+ 62 12		14.7		
7 47.1	+ 62 00		15.4		double system, bridge
7 48.1	+ 60 52		15.2		
7 50.3	+ 58 25		15.3		
7 50.7	+ 57 55		15.7		
7 51.4	+ 57 29		15.4		
7 51.9	+ 58 34		14.3		
7 52.0	+ 60 26	2209*	14.5		
7 52.5	+ 56 49	2461	15.5		

Position α 1950 h m	Position δ o '	NGC IC*	m_p	V_s km/sec	Remarks
7 52.6	+ 60 30	2460	12.5	+ 1442	m_H = 12.7
7 52.7	+ 59 01		15.5		
7 52.9	+ 61 47		15.2		
7 53.1	+ 56 48	2463	14.8		
7 53.1	+ 58 40		15.5		
7 53.3	+ 59 14		15.0		
7 54.0	+ 56 30	2468	14.9		double system, connected
7 54.0	+ 56 49	2469	13.2		
7 54.0	+ 59 21		15.6		
7 54.6	+ 56 50	2472=2473	15.4		
7 54.8	+ 59 15		14.7		} double system in halo
7 54.9	+ 59 17		15.4		
7 55.7	+ 57 29		15.7		
7 55.8	+ 57 03		15.5		compact
7 55.9	+ 60 25		13.9		
7 56.1	+ 56 31		15.6		
7 56.2	+ 56 30		15.5		
7 57.5	+ 57 03		15.7		
7 57.6	+ 61 32		13.9		
7 57.8	+ 56 42	2488	14.2		
7 58.0	+ 56 47		15.2		
7 58.0	+ 57 04		15.0		double system
7 58.3	+ 57 05	2497	14.5		compact
7 58.3	+ 61 31		13.5		
7 58.4	+ 56 51		15.6		
7 59.6	+ 61 25		15.1		
7 59.6	+ 61 29		14.5		
8 00.0	+ 61 42		15.6		double system
8 00.5	+ 61 41		15.1		
8 01.0	+ 56 37		15.6		
8 02.3	+ 61 13		15.4		
8 03.9	+ 56 50		15.5		
8 04.7	+ 57 55	2521	14.2		double system
8 04.8	+ 56 44		15.6		
8 05.2	+ 57 59		15.3		
8 05.3	+ 57 54		14.8		faint jet
8 05.7	+ 58 04		14.9		
8 06.0	+ 57 59		15.1		
8 07.1	+ 57 11		15.2		
8 07.8	+ 58 51		15.7		
8 08.0	+ 57 08		15.7		
8 08.1	+ 58 43		15.5		very compact
8 08.8	+ 58 05		15.4		
8 09.2	+ 58 10		15.7		
8 09.3	+ 58 00		14.9		
8 09.5	+ 58 17		15.3		double system, obscuring jet
8 10.5	+ 58 11		15.3		
8 10.6	+ 58 07		14.4		double system
8 10.6	+ 58 23		15.2		double system, contact + jet
8 11.2	+ 61 25		15.6		double system, ejecta
8 11.4	+ 58 20		14.7		
8 11.6	+ 58 27		15.3		
8 11.6	+ 60 47		15.5		double nucleus
8 11.7	+ 58 29		14.6		
8 12.0	+ 58 10		15.4		very compact
8 12.2	+ 57 52		15.6		
8 13.4	+ 60 06		15.2		
8 14.1	+ 57 55		15.3		
8 14.2	+ 59 17		15.6		

Position α 1950 h m	Position δ o '	NGC IC*	m_p	V_s km/sec	Remarks
8 14.9	+ 57 58	2549	12.1	+ 1082	m_H = 12.5
8 14.9	+ 58 26		14.9		
8 15.5	+ 59 52		15.7		
8 16.8	+ 56 39		14.6		
8 18.8	+ 56 28		14.9		
8 19.4	+ 62 26		15.4		
8 20.5	+ 61 42		15.4		
8 22.3	+ 60 04		15.5		
8 27.3	+ 61 10		15.3		
8 28.7	+ 61 58		15.0		
8 29.9	+ 56 59		15.5		
8 29.9	+ 57 43		15.2		long, faint jet
8 30.0	+ 60 18		15.7		
8 30.1	+ 57 45		15.1		
8 32.4	+ 61 29		15.7		
8 34.4	+ 61 36		15.4		
8 35.5	+ 61 08		15.3		

MAGNITUDES AND TYPES FROM OTHER SOURCES

NGC IC*	Bigay 1951		Pettit 1954		Humason, Mayall, Sandage 1956		Holmberg 1958	
2460	-	-	12.82	Sb	12.9	Sb	-	-
2549	-	-	12.20	S0	12.1	S0	-	-



FIELD No. 288

8^h55^m $+59^o30'$

Survey Plate No. 1296

GC STARS

Nos.	R.A.	Decl.	m_p
	h m s	o ' "	
11827	8 35 07.0	+ 60 06 58	6.42
12235	8 49 16.5	+ 62 09 04	5.72
12347	8 53 33.8	+ 58 24 42	6.90
12551	9 02 51.1	+ 59 32 44	6.19
12713	9 10 24.7	+ 61 37 51	5.23
12748	9 12 08.5	+ 56 57 00	5.48

CLUSTERS OF GALAXIES

Cluster	Character	Population	Diameter in cm	Distance	Number on chart
0831.0 + 6145	medium compact	105	2.4	VD	39
0831.3 + 5745	medium compact	130	3.8	VD	40
0834.6 + 6219	open	97	3.6	D	9
0834.7 + 5854	medium compact	179	4.3	VD	38
0837.6 + 5643	medium compact	86	1.4	ED	1
0839.4 + 5704	open	110	2.1	ED	37
0841.3 + 5855	medium compact	77	3.0	VD	36
0841.3 + 6106	open	154	6.0	D	29
0841.5 + 5619	medium compact	190	2.4	ED	2
0843.5 + 6203	compact	76	1.6	ED	27
0843.8 + 5940	compact	85	2.1	ED	28
0847.6 + 5648	compact	61	1.1	ED	8
0847.9 + 5754	compact	86	2.0	ED	35
0849.8 + 5937	open	64	3.5	VD	26
0850.2 + 5835	open	100	3.8	VD	34
0853.3 + 5710	open	141	3.9	VD	33
0853.6 + 5913	open	110	3.5	VD	24
0853.7 + 5942	compact	67	1.4	ED	25
0855.5 + 5628	medium compact	73	1.0	ED	3
0855.5 + 6130	medium compact	119	1.8	ED	23
0856.1 + 5818	compact	120	5.2	D	32
0857.0 + 6253	medium compact	213	4.1	MD	10
0858.1 + 5943	medium compact	136	4.3	VD	22
0858.5 + 6028	medium compact	60	0.8	ED	21
0859.1 + 5641	medium compact	49	0.8	ED	4
0859.6 + 6156	medium compact	245	5.0	VD	20
0902.7 + 6039	open	79	2.2	ED	19
0903.3 + 5802	medium compact	120	2.2	ED	31
0903.7 + 5700	open	164	5.3	MD	6
0904.5 + 5650	medium compact	97	1.0	ED	7
0905.0 + 5958	compact	51	0.7	ED	18
0905.2 + 5846	medium compact	87	4.6	VD	30
0905.8 + 6030	compact	171	2.5	VD	16
0907.2 + 6120	compact	55	0.7	ED	17
0911.2 + 5955	open	167	5.8	D	15
0914.2 + 6124	compact	108	2.7	VD	14
0914.3 + 5743	open	141	4.1	VD	43
0915.7 + 5815	compact	66	1.2	ED	41
0916.0 + 5634	compact	109	1.4	ED	5
0918.3 + 6048	open	93	2.2	ED	13
0918.5 + 5805	compact	102	1.4	ED	42
0920.1 + 6126	open	94	2.1	ED	11
0921.8 + 6244	medium compact	172	4.6	D	44
0923.1 + 5925	compact	250	5.6	ED	12

Average number of galaxies per cluster = 115.0

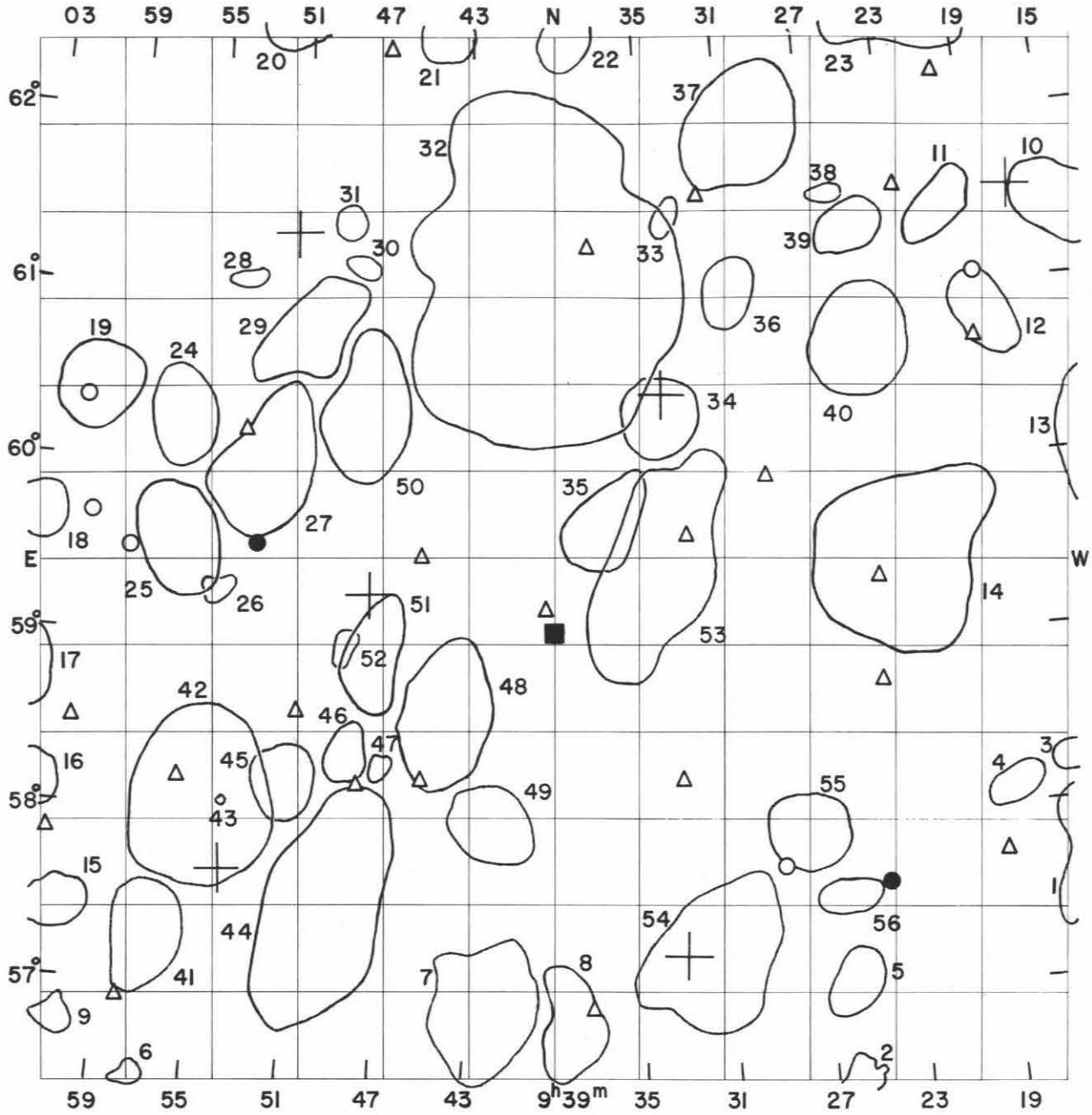
GALAXIES

Position α 1950 h m	Position δ 1950 o '	NGC IC*	m_p	V_s km/sec	Remarks
8 32.4	+ 61 29		15.7		
8 34.4	+ 61 36		15.4		
8 35.5	+ 61 08		15.3		
8 37.0	+ 60 07		15.5		double system, compacts

Position α 1950 h m	Position δ o '	NGC IC*	m_p	V_s km/sec	Remarks
8 40.4	+ 59 00		14.2		
8 45.2	+ 60 25	2654	12.8	+ 1360	m_H = 12.9 S
8 46.1	+ 57 19		15.7		double system
8 46.5	+ 60 16		15.4		
8 46.7	+ 57 33		15.5		
8 50.7	+ 57 21	522*	13.9		
8 51.0	+ 57 51		15.7		
8 51.7	+ 58 55	2685	12.1	+ 884	m_H = 12.5 S, loops
8 51.8	+ 57 45		15.6		quadruple system, bridges
8 52.1	+ 57 52		15.6		
8 53.0	+ 56 59		15.7		very compact
8 54.2	+ 59 24		15.2		
8 58.0	+ 60 21		14.3		
9 01.0	+ 60 08	2726	13.1		
9 03.6	+ 60 40	2742	12.0		m_H = 12.5 Sc
9 04.5	+ 59 16		15.5		double system
9 04.5	+ 62 20		15.5		
9 06.0	+ 62 27		14.0		
9 06.4	+ 60 10		15.7		
9 06.8	+ 62 10		15.7		
9 07.4	+ 62 13		15.3		compact
9 07.7	+ 60 15	2768	11.1	+ 1408	m_H = 12.0 E
9 09.2	+ 60 27		15.4		double system, bridge
9 12.9	+ 59 59		15.6		double system
9 18.8	+ 61 05		14.9		
9 19.0	+ 60 42		15.6		
9 20.3	+ 62 14		15.2		

MAGNITUDES AND TYPES FROM OTHER SOURCES

NGC IC*	Bigay 1951		Pettit 1954		Humason, Mayall, Sandage 1956		Holmberg 1958	
2654	-	-	12.86	Sa	12.8	Sa	-	-
2685	-	-	12.27	S0p	12.3	S0p	12.04	S0p
2742	12.1	Sc	-	-	-	-	-	-
2768	11.0	E6	11.26	S0	11.0	S0	-	-



FIELD No. 289

9^h39^m $+59^o30'$

Survey Plate No. 703

GC STARS

Nos.	R.A.	Decl.	m_p
	h m s	o ' "	
12853	9 16 53.0	+ 61 33 42	7.58
13249	9 33 08.1	+ 57 11 40	6.88
13274	9 33 54.8	+ 60 26 20	6.56
13540	9 47 27.1	+ 59 16 30	3.89
13613	9 51 25.7	+ 61 21 11	6.42
13677	9 53 45.4	+ 57 39 26	5.99

CLUSTERS OF GALAXIES

Cluster	Character	Population	Diameter in cm	Distance	Number on chart
0911.2 + 5955	open	167	5.8	D	13
0914.2 + 6124	compact	108	2.7	VD	10
0914.3 + 5743	open	141	4.1	VD	1
0915.7 + 5815	compact	66	1.2	ED	3
0918.3 + 6048	open	93	2.2	ED	12
0918.5 + 5805	compact	102	1.4	ED	4
0920.1 + 6126	open	94	2.1	ED	11
0921.8 + 6244	medium compact	172	4.6	D	23
0923.1 + 5925	compact	250	5.6	ED	14
0924.3 + 6041	compact	120	3.3	VD	40
0924.5 + 6121	medium compact	82	1.8	VD	39
0925.7 + 5626	compact	100	1.2	ED	2
0925.7 + 6132	medium compact	45	0.8	ED	38
0926.0 + 5700	medium compact	58	1.9	ED	5
0926.0 + 5730	compact	69	1.4	ED	56
0927.6 + 5752	medium compact	85	2.5	VD	55
0929.7 + 6156	open	112	3.9	VD	37
0930.6 + 6100	medium compact	89	1.8	ED	36
0932.1 + 5708	open	116	4.5	VD	54
0933.6 + 6127	medium compact	49	1.0	ED	33
0933.8 + 6017	open	97	2.6	ED	34
0934.3 + 5926	open	159	5.0	MD	53
0936.6 + 5939	medium compact	107	2.6	VD	35
0938.1 + 5645	medium compact	174	2.7	VD	8
0938.6 + 6228	open	93	1.6	ED	22
0939.5 + 6102	open	255	9.6	MD	32
0941.7 + 5756	medium compact	85	2.5	VD	49
0941.9 + 5653	compact	149	3.8	D	7
0943.7 + 5835	medium compact	125	3.7	D	48
0944.3 + 6230	medium compact	63	1.9	ED	21
0946.7 + 5816	compact	49	0.7	ED	47
0947.0 + 5854	medium compact	93	2.5	VD	51
0947.8 + 6017	open	113	3.5	D	50
0948.1 + 6107	compact	62	0.8	ED	30
0948.2 + 5820	medium compact	52	1.6	VD	46
0948.4 + 5858	compact	54	0.9	ED	52
0948.9 + 6123	compact	57	1.0	ED	31
0949.0 + 5725	medium compact	202	5.3	D	44
0950.6 + 6045	medium compact	161	3.1	VD	29
0950.9 + 5811	compact	145	2.1	VD	45
0951.5 + 6243	compact	146	2.9	ED	20
0952.2 + 5958	medium compact	285	3.7	VD	27
0953.7 + 5803	compact	23	0.2	ED	43
0953.8 + 6102	medium compact	60	0.8	ED	28
0954.3 + 5915	compact	106	0.9	ED	26
0954.6 + 5802	open	130	5.0	D	42
0956.2 + 6015	medium compact	87	2.5	ED	24
0956.3 + 5933	medium compact	144	3.1	VD	25
0956.7 + 5716	compact	110	2.8	VD	41
0957.1 + 5628	medium compact	52	0.7	ED	6
1000.3 + 5644	compact	73	1.2	ED	9
1000.4 + 6024	compact	73	2.7	ED	19
1000.8 + 5725	open	114	1.9	ED	15
1002.0 + 5807	open	96	1.7	ED	16
1002.7 + 5939	medium compact	95	1.8	ED	18
1003.2 + 5846	medium compact	108	2.6	ED	17

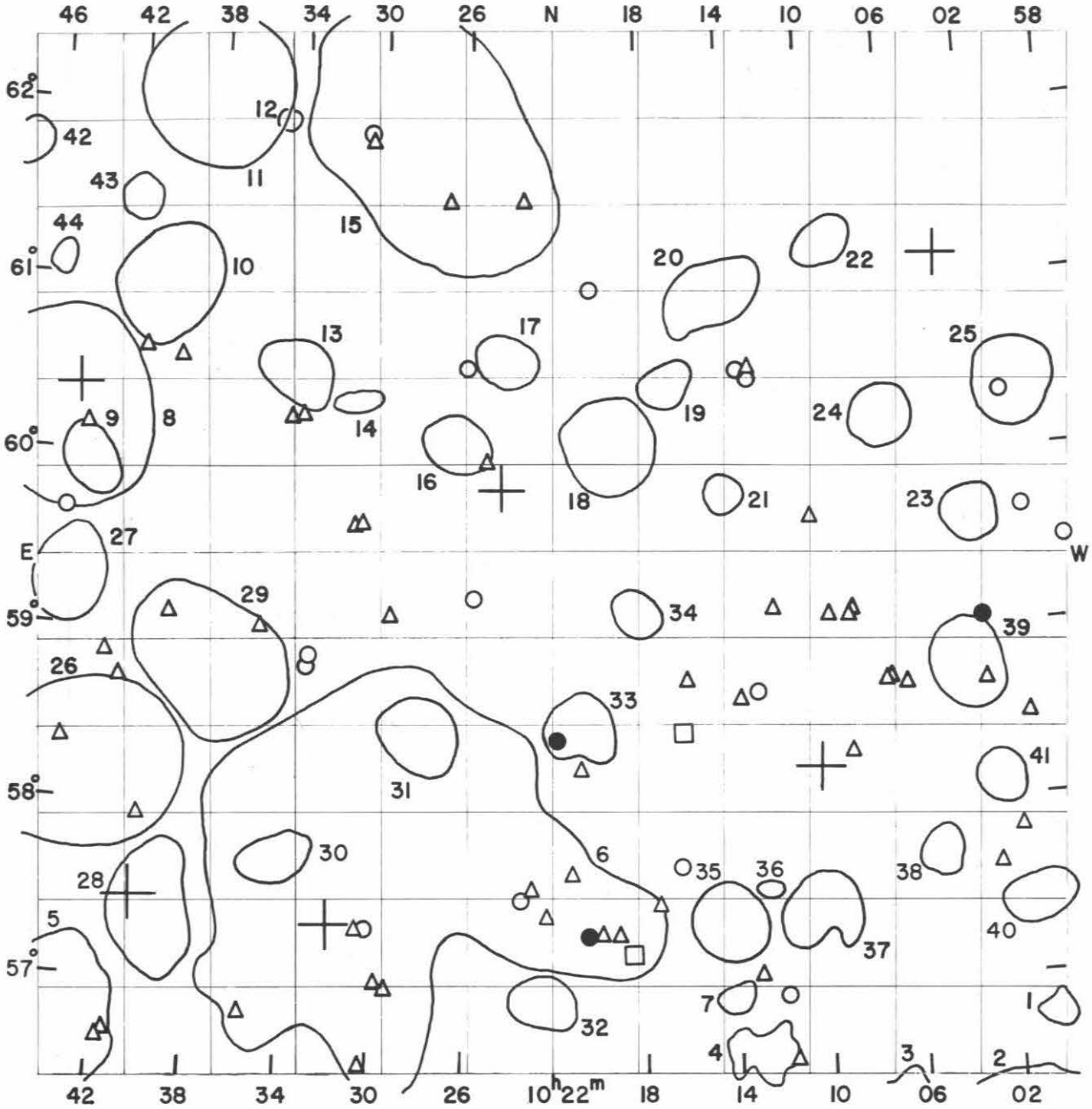
Average number of galaxies per cluster = 109.2

GALAXIES

Position α 1950 h m	Position δ 1950 o '	NGC IC*	m_p	V_s km/sec	Remarks
9 18.8	+ 61 05		14.9		
9 19.0	+ 57 44		15.7		diffuse
9 19.0	+ 60 42		15.6		
9 20.3	+ 62 14		15.2		
9 22.4	+ 61 35		15.5		
9 24.0	+ 59 22		15.7		compact
9 24.1	+ 58 45		15.7		diffuse spiral
9 24.2	+ 57 36	2870	13.9		
9 28.8	+ 57 43	2895	14.7		
9 29.1	+ 59 58		15.2		
9 32.0	+ 61 34		15.5		eruptive galaxy, filaments
9 32.8	+ 59 37		15.3		double system
9 33.2	+ 58 14		15.7		
9 37.2	+ 56 53		15.4		
9 37.5	+ 61 17		15.6		diffuse spiral
9 39.0	+ 59 05	2950	11.8	+ 1385	m_H = 12.1 SBa
9 39.4	+ 59 12		15.1		
9 44.9	+ 58 13		15.1		
9 45.0	+ 59 30		15.4		
9 47.2	+ 62 25		15.2		
9 47.8	+ 58 10		15.7		
9 50.6	+ 58 35		15.5		
9 52.6	+ 59 32	3043	13.3		m_H = 13.2
9 53.4	+ 60 12		15.6		extremely compact
9 55.7	+ 58 12		15.3		double system
9 57.9	+ 56 54		15.6		
9 58.5	+ 59 30		15.0		
10 00.3	+ 59 40		14.2		very compact
10 00.6	+ 58 30		15.5		compact
10 01.0	+ 60 21	3102	14.3		
10 01.4	+ 57 50		15.6		

MAGNITUDES AND TYPES FROM OTHER SOURCES

NGC IC*	Bigay 1951		Pettit 1954		Humason, Mayall, Sandage 1956		Holmberg 1958	
2950	11.9	SBa	11.96	SB0	11.8	SB0	-	-



FIELD No. 290

10^h22^m $+59^\circ30'$

Survey Plate No. 962

GC STARS

Nos.	R.A.	Decl.	m_p
	h m s	° ' "	
13884	10 03 42.7	+ 61 09 52	7.38
14019	10 10 06.3	+ 58 14 29	6.86
14345	10 24 26.8	+ 59 51 10	7.01
14527	10 31 57.4	+ 57 20 27	5.16
14736	10 40 34.8	+ 57 27 44	5.79
14828	10 44 19.9	+ 60 23 19	7.22

CLUSTERS OF GALAXIES

Cluster	Character	Population	Diameter in cm	Distance	Number on chart
1000.3 + 5644	compact	73	1.2	ED	1
1000.4 + 6024	compact	73	2.7	ED	25
1000.8 + 5725	open	114	1.9	ED	40
1002.0 + 5807	open	96	1.7	ED	41
1002.7 + 5939	medium compact	95	1.8	ED	23
1003.2 + 5846	medium compact	108	2.6	ED	39
1004.9 + 5743	open	80	1.4	ED	38
1006.6 + 6015	open	100	2.0	ED	24
1007.1 + 5613	medium compact	76	2.2	VD	3
1009.2 + 6115	compact	99	1.5	ED	22
1010.2 + 5724	open	163	2.4	ED	37
1012.5 + 5732	compact	60	0.7	ED	36
1012.8 + 5337	open	685	28.3	Near	2
1013.0 + 5634	medium compact	154	2.1	ED	4
1014.0 + 5654	medium compact	74	1.1	ED	7
1014.1 + 5949	compact	106	1.2	ED	21
1014.2 + 5721	medium compact	90	2.4	VD	35
1014.5 + 6058	medium compact	159	2.7	ED	20
1016.8 + 6027	open	67	1.5	ED	19
1018.0 + 5908	open	70	1.5	ED	34
1019.2 + 6007	medium compact	150	3.1	VD	18
1020.6 + 5829	compact	122	2.2	ED	33
1022.4 + 5651	medium compact	95	1.9	VD	32
1024.2 + 6035	medium compact	60	1.8	ED	17
1026.5 + 6006	open	78	2.0	ED	16
1027.9 + 5826	open	110	2.5	ED	31
1027.9 + 6150	medium compact	160	7.7	Near	15
1029.3 + 5736	medium compact	210	12.0	Near	6
1031.1 + 6021	compact	55	0.9	ED	14
1034.0 + 5743	medium compact	68	1.9	ED	30
1034.0 + 6030	medium compact	108	2.2	ED	13
1035.0 + 6156	compact	45	0.7	ED	12
1037.1 + 5848	medium compact	104	4.7	D	29
1038.5 + 6206	medium compact	110	4.8	D	11
1039.4 + 5722	open	81	3.5	D	28
1040.3 + 6058	medium compact	124	3.5	VD	10
1042.0 + 6127	open	55	1.3	ED	43
1042.9 + 5810	compact	415	6.1	VD	26
1043.4 + 5956	compact	108	2.0	ED	9
1043.9 + 5635	open	74	5.5	Near	5
1044.0 + 5915	open	85	2.7	VD	27
1044.2 + 6013	open	165	5.4	MD	8
1045.6 + 6105	open	61	0.8	ED	44
1047.7 + 6145	medium compact	63	1.4	ED	42

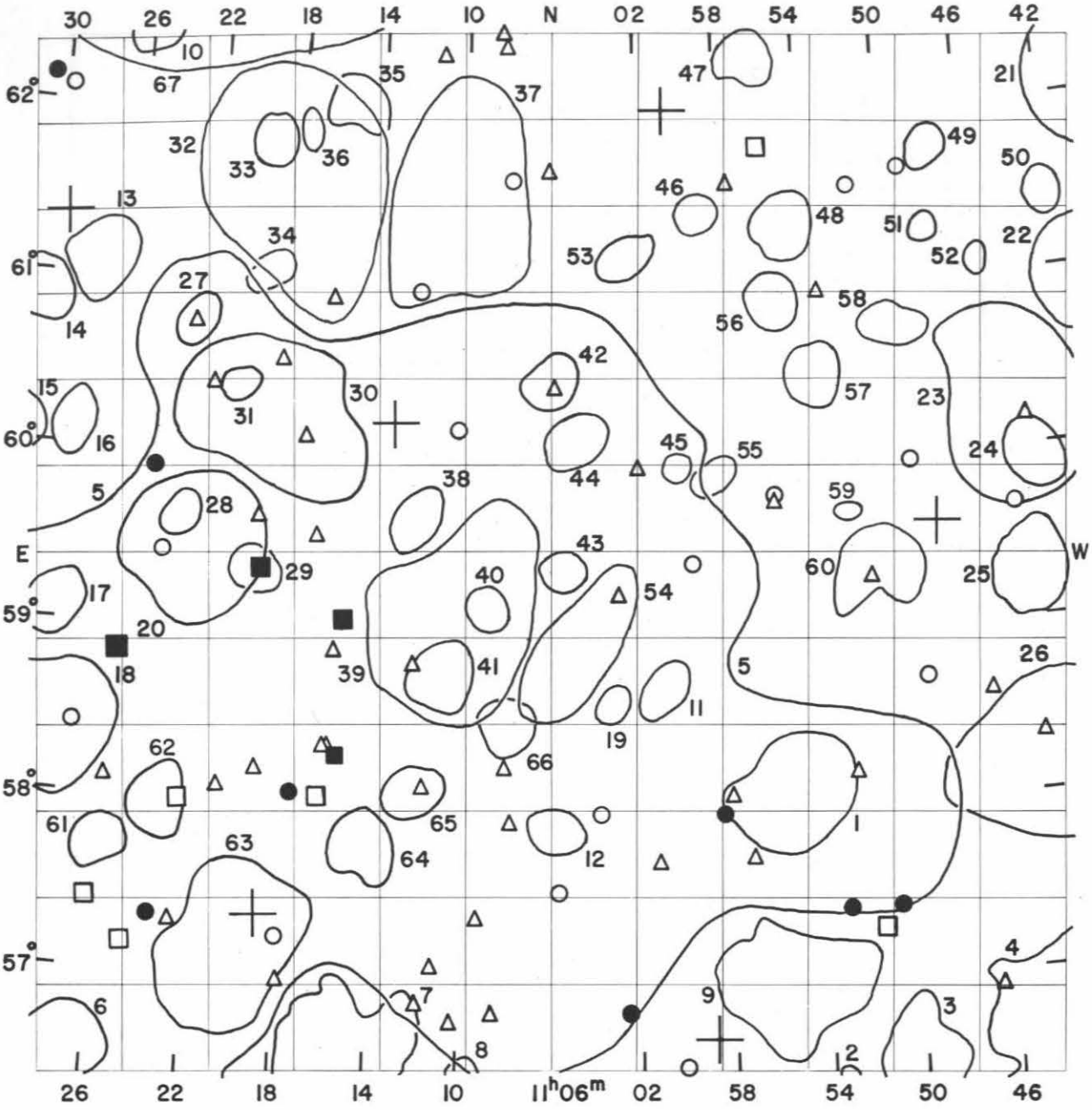
Average number of galaxies per cluster = 119.3

GALAXIES

Position α 1950 h m	Position δ 1950 ° ′	NGC IC*	m_p	V_s km/sec	Remarks
9 58.5	+ 59 30		15.0		
10 00.3	+ 59 40		14.2		very compact
10 00.6	+ 58 30		15.5		compact
10 01.0	+ 60 21	3102	14.3		

Position α 1950 h m	Position δ o '	NGC IC*	m_p	V_s km/sec	Remarks
10 01.4	+ 57 50		15.6		
10 02.3	+ 57 38		15.3		
10 02.4	+ 58 41		15.1		very compact, ejecta
10 02.5	+ 59 03		13.6		
10 06.1	+ 58 42		15.5		
10 06.8	+ 58 44		15.6		
10 07.0	+ 58 43		15.7		
10 08.5	+ 59 08		15.7		
10 08.6	+ 59 07		15.5		
10 08.7	+ 58 19		15.6		
10 09.5	+ 59 07		15.7		
10 10.2	+ 59 41		15.6		compact
10 11.6	+ 56 33		15.4		extremely compact
10 11.8	+ 56 55	3164	14.5		
10 12.0	+ 59 09		15.1		
10 12.8	+ 58 40		14.9		
10 12.9	+ 60 34		15.7		
10 13.0	+ 57 03		15.7		triple system
10 13.0	+ 60 29	3168	14.6		compact
10 13.5	+ 58 39		15.6		
10 13.5	+ 60 32		14.9		compact
10 16.0	+ 58 45		15.5		
10 16.2	+ 58 28	3182	13.0		
10 16.4	+ 57 40	3188	14.7		double system
10 17.3	+ 57 28		15.5		
10 18.5	+ 57 12	3206	12.7		
10 19.1	+ 57 18		15.6		
10 19.8	+ 57 18	3214	15.2		
10 20.3	+ 61 00		15.0		
10 20.4	+ 57 17	3220	13.7		
10 20.7	+ 58 15		15.5		
10 21.2	+ 57 39		15.2		
10 21.8	+ 58 25	3225	13.3		
10 22.3	+ 57 24		15.3		
10 23.0	+ 57 33		15.1		compact
10 23.4	+ 61 32	3236	15.3		very compact
10 23.5	+ 57 29	3238	14.1		
10 25.0	+ 60 01		15.2		
10 25.6	+ 59 14		14.8		
10 26.1	+ 60 33		14.9		
10 26.9	+ 61 31		15.4		
10 29.3	+ 56 58		15.4		
10 29.5	+ 59 07		15.1		
10 29.7	+ 57 00		15.1		compact
10 30.2	+ 57 19		14.7		
10 30.3	+ 56 32		15.6		compact
10 30.6	+ 57 19		15.5		double system
10 30.7	+ 59 40		15.4		triple system
10 30.7	+ 61 52		15.6		very compact
10 30.8	+ 61 54		14.6		extremely compact
10 31.1	+ 59 39		15.6		very compact
10 33.1	+ 58 53	3286	14.6		
10 33.2	+ 58 49	3288	15.0		
10 33.7	+ 60 16		15.7		
10 34.2	+ 60 15		15.7		
10 35.3	+ 59 03		15.4		extremely compact
10 35.5	+ 56 49		15.2		
10 39.5	+ 59 06		15.6		diffuse
10 39.6	+ 60 35		15.2		

Position α 1950 h m	Position δ o '	NGC IC*	m_p	V_s km/sec	Remarks
10 40.4	+ 57 56		15.6		
10 41.2	+ 60 38		15.4		extremely diffuse
10 41.3	+ 56 41		15.3		diffuse spiral
10 41.6	+ 56 38		15.1		
10 41.6	+ 58 43		15.5		
10 42.3	+ 58 50		15.3		
10 43.8	+ 60 11		15.7		
10 44.0	+ 58 21		15.7		compact
10 44.6	+ 59 40		15.0		very compact



FIELD No. 291

11^h06^m $+59^\circ30'$

Survey Plate No. 712

GC STARS

Nos.	R.A.	Decl.	m_p
	h m s	° ′ ″	
14912	10 48 16.1	+ 59 35 10	5.66
15145	10 58 50.3	+ 56 39 03	2.44
15185	11 00 39.6	+ 62 01 17	1.95
15492	11 13 22.6	+ 60 12 57	6.66
15607	11 18 58.1	+ 57 20 57	6.32
15822	11 29 31.7	+ 61 21 35	5.47

CLUSTERS OF GALAXIES

Cluster	Character	Population	Diameter in cm	Distance	Number on chart
1038.5 + 6206	medium compact	110	4.8	D	21
1040.3 + 6058	medium compact	124	3.5	VD	22
1042.0 + 6127	open	55	1.3	ED	50
1042.9 + 5810	compact	415	6.1	VD	26
1043.4 + 5956	compact	108	2.0	ED	24
1043.9 + 5635	open	74	5.5	Near	4
1044.0 + 5915	open	85	2.7	VD	25
1044.2 + 6013	open	165	5.4	MD	23
1045.6 + 6105	open	61	0.8	ED	52
1047.7 + 6145	medium compact	63	1.4	ED	49
1048.0 + 6116	medium compact	43	0.9	ED	51
1049.7 + 6043	open	81	1.6	VD	58
1050.2 + 5618	open	151	3.8	MD	3
1051.0 + 5920	open	115	2.8	D	60
1052.3 + 5941	medium compact	75	0.7	ED	59
1053.4 + 5618	medium compact	57	1.1	ED	2
1053.6 + 6027	open	97	1.9	VD	57
1054.9 + 6120	medium compact	116	2.1	ED	48
1055.2 + 5802	open	117	3.8	D	1
1055.6 + 5655	compact	205	4.3	D	9
1055.6 + 6053	open	69	1.7	VD	56
1056.5 + 6218	compact	88	1.8	ED	47
1058.4 + 5953	compact	73	1.3	ED	55
1059.0 + 6125	medium compact	61	1.3	ED	46
1100.0 + 5957	medium compact	47	0.9	ED	45
1100.8 + 5841	compact	88	1.6	VD	11
1102.6 + 6110	open	64	1.6	ED	53
1103.2 + 5835	compact	54	1.1	ED	19
1104.8 + 5852	medium compact	116	3.5	D	54
1104.9 + 6007	open	89	1.9	ED	44
1105.4 + 5921	compact	66	1.4	ED	43
1105.8 + 5750	medium compact	67	1.7	VD	12
1106.1 + 6028	compact	107	1.8	ED	42
1107.9 + 5828	open	67	1.8	VD	66
1108.8 + 5908	medium compact	72	1.3	VD	40
1109.7 + 5625	compact	55	1.1	ED	8
1110.6 + 5901	medium compact	132	5.9	D	39
1110.6 + 6125	open	126	5.7	MD	37
1111.0 + 5843	compact	99	2.1	VD	41
1112.0 + 5805	open	96	1.8	VD	65
1112.1 + 5939	compact	161	1.8	ED	38
1114.1 + 5745	compact	163	2.2	D	64
1114.9 + 5637	medium compact	355	3.8	D	7
1115.5 + 6202	open	55	1.8	VD	35
1117.9 + 6152	open	54	0.9	ED	36
1118.0 + 6133	open	175	6.7	D	32
1118.7 + 6012	medium compact	178	5.4	D	30
1119.5 + 5920	medium compact	87	1.6	VD	29
1119.5 + 6102	medium compact	60	1.4	ED	34
1119.6 + 6148	compact	94	1.6	ED	33
1119.9 + 5708	medium compact	122	4.9	MD	63
1120.6 + 6023	medium compact	62	1.1	ED	31
1122.3 + 5927	medium compact	131	4.6	MD	20
1122.3 + 6317	open	156	13.1	Near	67
1122.9 + 6045	medium compact	70	1.4	ED	27
1123.0 + 5938	medium compact	82	1.3	ED	28
1123.3 + 5757	open	108	2.1	ED	62

Cluster	Character	Population	Diameter in cm	Distance	Number on chart
1126.0 + 5744	medium compact	58	1.7	VD	61
1126.0 + 6226	open	68	1.4	ED	10
1127.7 + 6104	open	172	2.4	VD	13
1128.1 + 5823	open	200	4.0	VD	18
1128.4 + 5618	compact	178	4.6	MD	6
1128.5 + 6007	open	77	1.8	ED	16
1128.6 + 5903	medium compact	81	2.0	ED	17
1130.6 + 6054	open	134	2.2	ED	14
1131.2 + 6009	medium compact	100	2.1	VD	15
1138.7 + 5650	medium compact	2690	49.2	Near	5 *)

Average number of galaxies per cluster = 146.6

*) see special map on page 387 of volume III.

GALAXIES

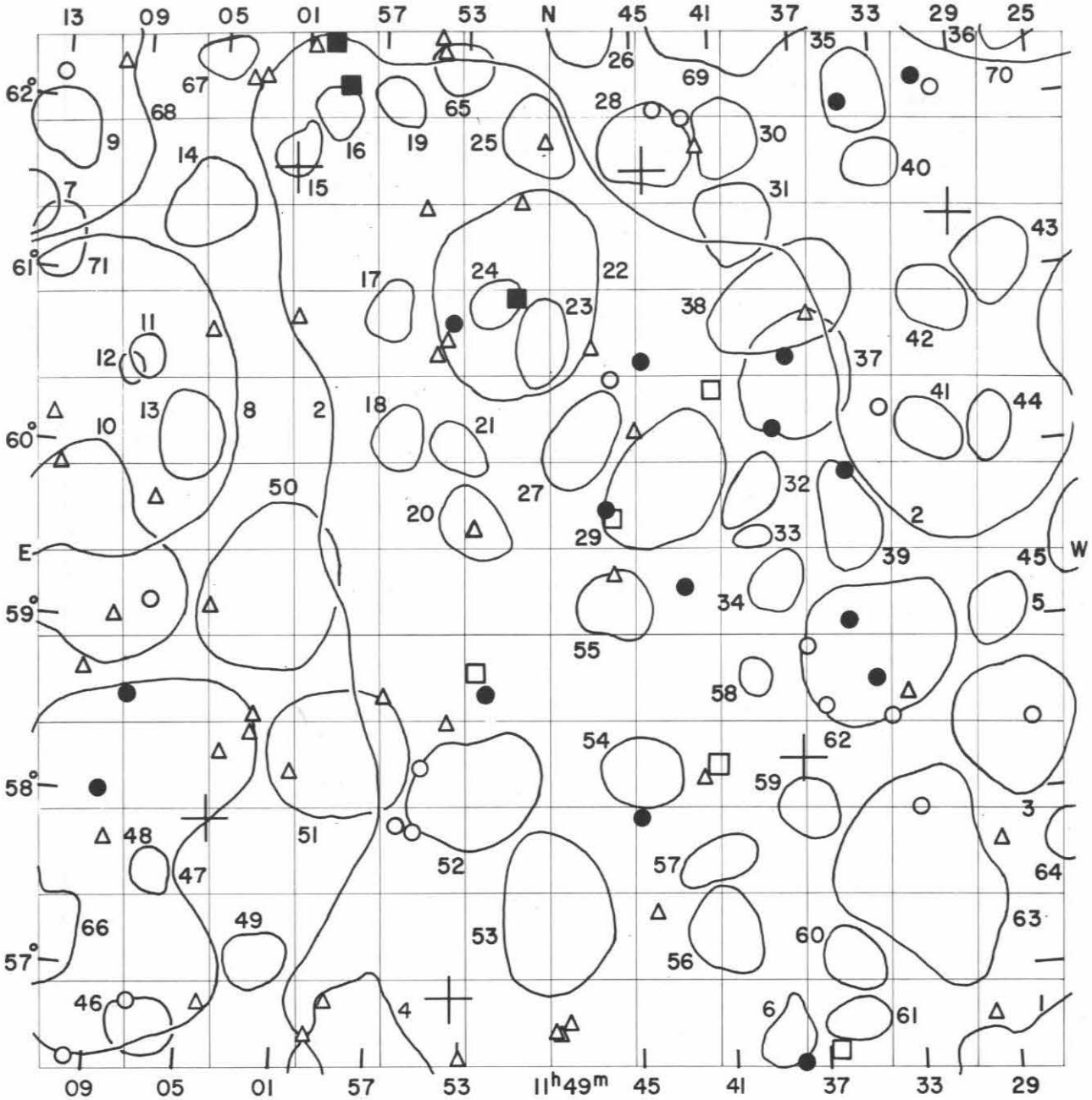
Position α 1950 h m	Position δ ° ′	NGC IC*	m_p	V_s km/sec	Remarks
10 43.8	+ 60 11		15.7		
10 44.0	+ 58 21		15.7		compact
10 44.6	+ 59 40		15.0		very compact
10 46.2	+ 58 37		15.5		
10 46.6	+ 56 54		15.4		very compact
10 49.1	+ 58 43	3408	14.1		
10 49.1	+ 61 39	3407	14.8		
10 49.3	+ 59 57		14.9		
10 50.7	+ 57 24	3440	14.0		
10 51.4	+ 59 18		15.6		
10 51.5	+ 57 15	3445	12.8		m_H = 12.9 Sc
10 51.6	+ 61 34	3435	14.2		
10 52.4	+ 58 10		15.7		triple system
10 53.0	+ 57 24	3458	13.2		m_H = 13.0
10 53.3	+ 60 57		15.7		compact
10 55.7	+ 59 47	3470	14.3		
10 55.8	+ 59 45		15.6		
10 56.0	+ 61 48	3471	13.0		
10 57.1	+ 57 43		15.5		
10 57.6	+ 61 36		15.6		
10 58.0	+ 58 04		15.2		double system
10 58.4	+ 57 57	3488	13.7		
10 59.6	+ 59 24		15.0		
11 00.2	+ 56 29	3499	14.3		
11 01.3	+ 57 41		15.1		
11 02.0	+ 59 58		15.2		double system
11 02.6	+ 56 48	3517	13.8		double system
11 03.0	+ 59 13		15.7		
11 03.8	+ 57 58		15.0		
11 05.7	+ 57 30	3530	14.4		
11 05.8	+ 60 25		15.6		triple system
11 06.1	+ 61 41		15.7		
11 07.8	+ 57 55		15.2		
11 07.8	+ 61 38	3543	14.8		
11 08.1	+ 58 14		15.5		
11 08.2	+ 62 25		15.4		
11 08.4	+ 62 28		15.6		
11 08.6	+ 56 49		15.4		very disrupted spiral
11 09.3	+ 57 21		15.3		

Position α 1950 h m	Position δ ° ′	NGC IC*	m_p	V_s km/sec	Remarks
11 10.3	+ 60 11		14.6		diffuse spiral
11 10.4	+ 56 45		15.3		double system
11 11.2	+ 57 04		15.3		
11 11.3	+ 62 21		15.2		
11 11.7	+ 58 06		15.1		
11 11.8	+ 56 51		15.6		
11 12.2	+ 60 58	3589	14.5		
11 12.3	+ 58 49		15.5		
11 15.5	+ 59 05	3610	11.4	+ 1765	m_H = 11.7 E
11 15.6	+ 58 17	3613	11.6	+ 2054	m_H = 12.0 E
11 15.8	+ 58 54		15.4		
11 16.0	+ 58 20		15.7		compact
11 16.2	+ 58 20		15.1		very compact
11 16.4	+ 60 55		15.6		
11 16.5	+ 58 02	3619	12.6	+ 1649	m_H = 12.8 Sa
11 16.8	+ 59 34		15.1		diffuse spiral
11 17.5	+ 60 08		15.4		
11 17.6	+ 58 04	3625	13.9		
11 17.9	+ 56 59		15.4		
11 18.0	+ 57 14		14.9		double system
11 18.7	+ 60 34		15.5		
11 19.2	+ 58 12		15.7		
11 19.4	+ 59 22	3642	11.9	+ 1623	m_H = 12.4 Sc
11 19.5	+ 59 40		15.6		
11 21.0	+ 58 05		15.5		
11 21.9	+ 60 25		15.7		compact
11 22.6	+ 57 18		15.6		
11 22.6	+ 58 00	3669	12.9		
11 23.0	+ 60 45	3671	15.7		compact
11 23.6	+ 57 20	3674	13.1		
11 23.9	+ 59 26	691*	14.2		compact, halo + jet
11 24.5	+ 59 55		14.0		
11 24.7	+ 57 10	3683	12.7		m_H = 13.2
11 25.7	+ 58 50	3690+694*	11.8		m_H = 12.1 S *)
11 25.9	+ 58 07		15.5		
11 26.4	+ 57 25		12.6		
11 27.5	+ 58 25		15.0		diffuse
11 29.9	+ 62 07		14.1		
11 30.8	+ 62 10	3725	13.6		

*) disrupted double system, star superposed.

MAGNITUDES AND TYPES FROM OTHER SOURCES

NGC IC*	Bigay 1951		Pettit 1954		Humason, Mayall, Sandage 1956		Holmberg 1958	
3610	11.7	E4	11.95	E5	11.9	SB0	-	-
3613	-	-	-	-	11.8	E5	-	-
3619	-	-	-	-	12.6	S0	-	-
3642	-	-	-	-	11.6	Sb	11.52	Sc-
3683	12.4	-	-	-	-	-	-	-



FIELD No. 292

11^h49^m $+59^\circ30'$

Survey Plate No. 723

GC STARS

Nos.	R.A.	Decl.	m_p
	h m s	o ' "	
15822	11 29 31.7	+ 61 21 35	5.47
16020	11 37 44.0	+ 58 14 51	6.10
16158	11 44 26.7	+ 61 40 49	6.64
16315	11 53 22.3	+ 56 52 36	5.93
16480	12 01 26.5	+ 61 40 54	7.92
16550	12 04 13.6	+ 57 52 45	7.20

CLUSTERS OF GALAXIES

Cluster	Character	Population	Diameter in cm	Distance	Number on chart	
1122.3 + 5927	medium compact	131	4.6	MD	45	
1122.3 + 6317	open	156	13.1	Near	70	
1126.0 + 5744	medium compact	58	1.7	VD	64	
1126.0 + 6226	open	68	1.4	ED	36	
1127.7 + 6104	open	172	2.4	VD	43	
1128.1 + 5823	open	200	4.0	VD	3	
1128.4 + 5618	compact	178	4.6	MD	1	
1128.5 + 6007	open	77	1.8	ED	44	
1128.6 + 5903	medium compact	81	2.0	ED	5	
1130.6 + 6054	open	134	2.2	ED	42	
1131.2 + 6009	medium compact	100	2.1	VD	41	
1132.5 + 5734	medium compact	215	5.7	D	63	
1133.2 + 6141	medium compact	97	1.7	ED	40	
1134.0 + 6207	open	158	2.3	ED	35	
1134.3 + 5852	medium compact	124	4.7	VD	62	
1135.3 + 5937	open	132	2.5	VD	39	
1135.8 + 5645	medium compact	107	1.6	ED	61	
1135.9 + 5706	open	109	2.0	ED	60	
1137.4 + 6028	open	159	3.8	D	37	
1137.5 + 5759	open	94	1.9	ED	59	
1137.8 + 6055	open	141	3.8	MD	38	
1138.6 + 5917	open	122	1.8	ED	34	
1138.6 + 6305	open	165	8.4	MD	69	
1138.7 + 5640	medium compact	88	1.7	D	6	
1138.7 + 5650	medium compact	2690	49.2	Near	2	*)
1139.7 + 5934	compact	51	0.8	ED	33	
1139.8 + 5845	compact	155	1.1	ED	58	
1139.8 + 5950	compact	177	2.0	ED	32	
1140.1 + 6124	medium compact	159	2.4	VD	31	
1140.5 + 6151	open	152	2.2	VD	30	
1141.3 + 5715	medium compact	120	2.5	VD	56	
1141.5 + 5741	open	124	1.8	ED	57	
1143.7 + 5952	medium compact	180	4.2	VD	29	
1144.4 + 6149	open	182	2.8	ED	28	
1144.7 + 5812	open	115	2.3	ED	54	
1146.0 + 5910	open	116	2.2	ED	55	
1147.4 + 6237	compact	244	2.7	ED	26	
1147.7 + 6005	open	147	2.7	VD	27	
1148.8 + 5721	medium compact	307	4.4	D	53	
1149.5 + 6040	compact	150	2.2	ED	23	
1149.6 + 6153	open	145	2.3	VD	25	
1150.8 + 6057	open	121	5.9	D	22	
1151.7 + 6054	medium compact	64	1.5	ED	24	
1152.4 + 5805	compact	140	3.8	VD	52	
1152.6 + 5939	medium compact	67	2.2	ED	20	
1153.2 + 6216	medium compact	55	1.7	ED	65	
1153.5 + 6004	compact	82	1.6	ED	21	
1156.2 + 6007	open	87	1.8	ED	18	
1156.5 + 6206	compact	80	1.6	ED	19	
1156.7 + 6050	compact	82	1.7	ED	17	
1156.8 + 5627	compact	172	4.7	Near	4	
1158.3 + 5816	compact	270	4.5	VD	51	
1159.5 + 6202	open	72	1.6	VD	16	
1201.6 + 6145	medium compact	60	1.5	ED	15	
1201.7 + 5912	medium compact	204	4.9	D	50	
1201.8 + 5705	open	116	1.9	ED	49	
1205.1 + 6219	compact	100	1.6	ED	67	

Cluster	Character	Population	Diameter in cm	Distance	Number on chart
1205.5 + 6126	compact	144	2.7	VD	14
1205.8 + 6005	compact	170	2.3	ED	13
1206.4 + 5733	open	85	1.3	ED	48
1206.5 + 5640	medium compact	156	1.9	ED	46
1207.6 + 5735	open	161	9.0	Near	47
1208.2 + 6032	compact	77	1.2	ED	11
1209.0 + 6027	compact	67	0.9	ED	12
1209.8 + 5920	medium compact	190	5.8	MD	10
1211.4 + 6013	medium compact	220	10.3	Near	8
1212.3 + 5711	open	88	4.1	D	66
1212.5 + 6110	medium compact	55	2.1	ED	71
1212.9 + 6150	medium compact	116	2.2	ED	9
1214.4 + 6122	open	96	2.0	ED	7
1216.5 + 6148	open	135	10.2	Near	68

Average number of galaxies per cluster = 166.4

*) see special map on page 387 of volume III.

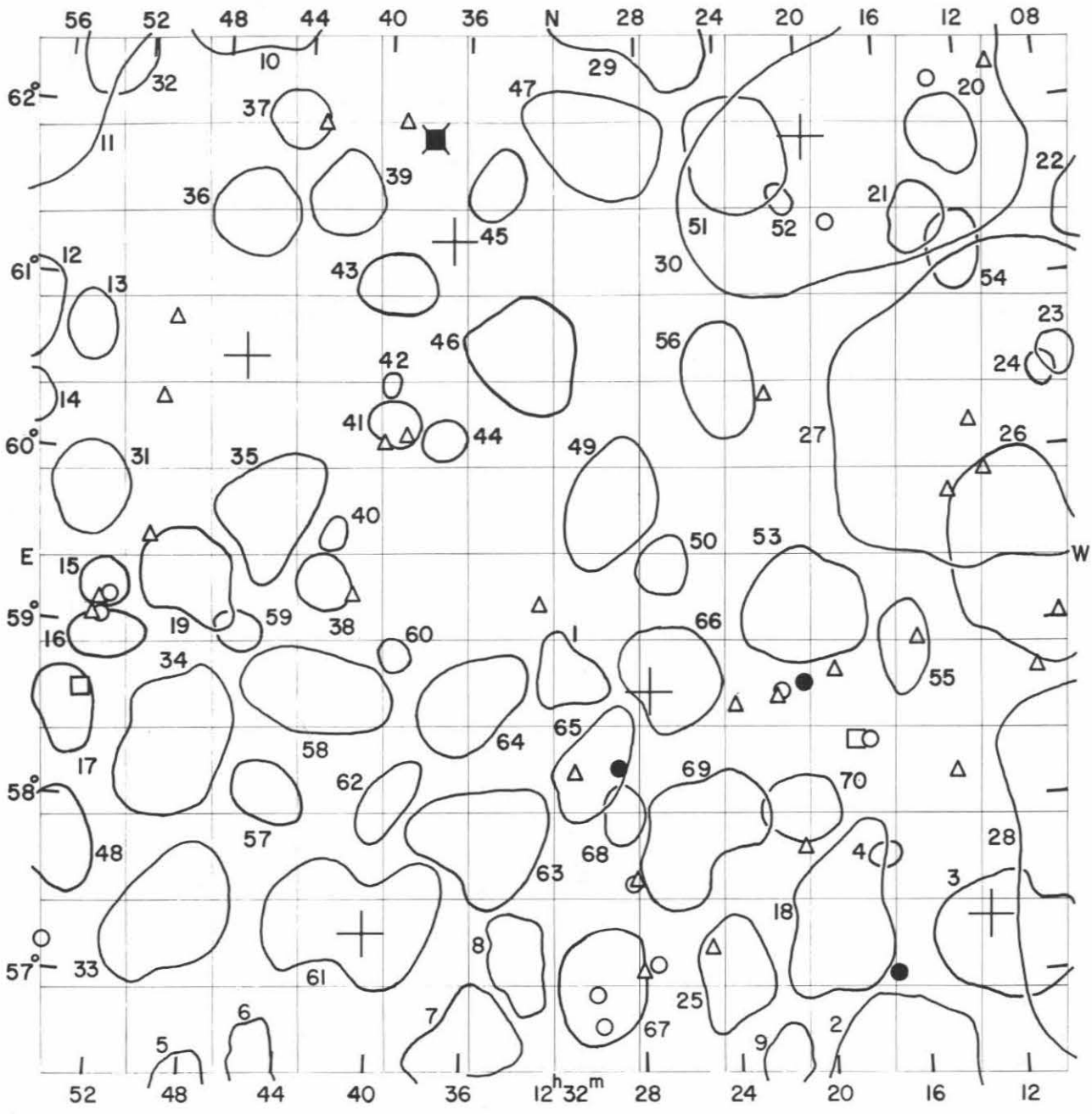
GALAXIES

Position α 1950 h m	Position δ o '	NGC IC*	m_p	V_s km/sec	Remarks
11 27.5	+ 58 25		15.0		diffuse
11 29.3	+ 57 43		15.3		
11 29.9	+ 62 07		14.1		
11 30.0	+ 56 42		15.5		
11 30.8	+ 62 10	3725	13.6		
11 32.6	+ 57 55		14.8		
11 32.9	+ 58 36		15.1		
11 33.4	+ 60 15	3740	14.9		
11 33.6	+ 58 29		14.3		
11 34.3	+ 58 42	3757	13.5		
11 34.7	+ 62 02	3762	13.3		
11 35.2	+ 59 53	3770	13.5		
11 35.4	+ 59 02		14.0		
11 36.6	+ 56 32	3780	12.2		m_H = 12.6 Sc
11 36.6	+ 58 33		14.2		diffuse spiral
11 36.7	+ 60 49		15.4		
11 37.4	+ 58 54	3795	14.1		
11 37.8	+ 60 34	3796	13.4		
11 38.1	+ 56 28	3804	13.8		
11 38.5	+ 60 10	3809	13.6		
11 41.3	+ 60 23	3835	13.0		
11 41.5	+ 58 14	3838	12.7		
11 41.8	+ 61 49		15.4		double system
11 42.1	+ 58 10		15.3		
11 42.5	+ 61 59		14.5		
11 42.8	+ 59 15		13.5		
11 44.0	+ 62 01		15.0		
11 44.4	+ 57 23		15.3		
11 44.6	+ 60 34		13.9		
11 45.0	+ 57 55		13.9		double nebula, halo
11 45.0	+ 60 10		15.3		
11 46.0	+ 59 20		15.5		
11 46.1	+ 59 42	3894	12.9		
11 46.1	+ 60 28		15.0		
11 46.4	+ 59 43	3895	14.0		

Position α 1950 h m	Position δ o '	NGC IC*	m_p	V_s km/sec	Remarks
11 47.0	+ 60 38		15.2		
11 48.1	+ 56 44		15.1		diffuse irregular
11 48.6	+ 56 40		15.7		
11 48.8	+ 56 41		15.5		
11 49.2	+ 61 50		15.4		
11 50.3	+ 61 30		15.1		
11 50.5	+ 60 56	3945	11.6	+ 1220	m_H = 12.1 SBa
11 51.9	+ 58 40	3958	13.1		
11 52.4	+ 58 46	3963	12.2		m_H = 12.7 S
11 52.6	+ 59 35		15.6		
11 53.0	+ 56 32		15.6		
11 53.5	+ 60 47	3978	13.2		
11 53.6	+ 58 29		15.1		diffuse spiral, filaments
11 53.8	+ 60 40		15.7		very compact
11 54.1	+ 62 23		15.7		
11 54.3	+ 60 35		15.5		
11 54.3	+ 62 27		15.7		compact
11 54.7	+ 58 13		14.5		
11 55.0	+ 57 50		14.6		
11 55.0	+ 61 28		15.7		
11 55.8	+ 57 52		14.8		
11 56.5	+ 58 37		15.7		
11 58.7	+ 56 50		15.7		
11 58.9	+ 62 10	4036	11.5	+ 1382	m_H = 11.9 Sa
11 59.6	+ 56 39		15.2		
11 59.6	+ 62 25	4041	11.6		m_H = 12.0 Sc
12 00.6	+ 58 10	4054	15.2		triple system
12 00.6	+ 62 24		15.7		very compact
12 01.0	+ 60 47		15.6		
12 02.3	+ 58 30		15.7		
12 02.4	+ 58 23		15.4		disrupted spiral
12 03.0	+ 62 12		15.5		
12 03.7	+ 58 16		15.5		extended filament
12 03.7	+ 62 11		15.6		
12 04.2	+ 56 49		15.6		
12 04.5	+ 59 06		15.3		double system
12 05.0	+ 60 42		15.6		
12 07.2	+ 56 48		14.3		
12 07.3	+ 59 07	4141	14.5		
12 07.4	+ 59 43		15.4		
12 08.0	+ 58 35	4149	13.9		
12 08.7	+ 57 45		15.6		
12 09.0	+ 58 00	4161	13.7		
12 09.0	+ 59 01		15.4		
12 09.8	+ 56 27	4172	14.4		
12 10.1	+ 58 43		15.7		
12 10.2	+ 62 14		15.7		
12 11.8	+ 59 53	4195	15.5		diffuse spiral
12 12.4	+ 60 10	4199	15.5		double system, bridge
12 13.2	+ 62 10		14.9		

MAGNITUDES AND TYPES FROM OTHER SOURCES

NGC IC*	Bigay 1951		Pettit 1954		Humason, Mayall, Sandage 1956		Holmberg 1958	
3780	12.1	Sc	-	-	-	-	-	-
3804	12.5	-	-	-	-	-	-	-
3838	12.5	-	-	-	-	-	-	-
3945	-	-	-	-	11.7	SB0	-	-
3958	12.8	-	-	-	-	-	-	-
3963	11.7	-	-	-	-	-	-	-
4036	-	-	-	-	11.6	S0	11.48	S0
4041	-	-	-	-	-	-	11.48	Sc-



FIELD No. 293

12^h32^m + 59°30'

Survey Plate No. 1427

GC STARS

Nos.	R.A.	Decl.	m_p
	h m s	° ' "	
16736	12 12 57.6	+ 57 18 37	3.44
16867	12 19 41.5	+ 61 52 07	6.86
17038	12 27 37.7	+ 58 40 50	5.44
17228	12 36 44.0	+ 61 18 12	7.38
17293	12 40 16.4	+ 57 16 24	7.48
17404	12 46 29.3	+ 60 35 32	5.87

CLUSTERS OF GALAXIES

Cluster	Character	Population	Diameter in cm	Distance	Number on chart
1205.5 + 6126	compact	144	2.7	VD	22
1207.6 + 5735	open	161	9.0	Near	28
1208.2 + 6032	compact	77	1.2	ED	23
1209.0 + 6027	compact	67	0.9	ED	24
1209.8 + 5920	medium compact	190	5.8	MD	26
1211.4 + 6013	medium compact	220	10.3	Near	27
1212.3 + 5711	open	88	4.1	D	3
1212.5 + 6110	medium compact	55	2.1	ED	54
1212.9 + 6150	medium compact	116	2.2	ED	20
1214.4 + 6122	open	96	2.0	ED	21
1216.2 + 5855	open	75	2.1	VD	55
1216.5 + 6148	open	135	10.2	Near	30
1216.7 + 5542	medium compact	217	9.3	Near	2
1217.5 + 5743	compact	42	0.8	ED	4
1219.5 + 5720	open	103	4.1	MD	18
1220.6 + 5909	compact	107	3.8	VD	53
1221.0 + 5759	compact	100	2.2	ED	70
1221.0 + 6130	compact	57	0.9	ED	52
1222.0 + 5632	medium compact	144	1.6	VD	9
1223.2 + 6147	medium compact	146	3.5	VD	51
1224.1 + 5703	medium compact	209	2.8	ED	25
1224.2 + 6030	open	106	2.8	D	56
1225.5 + 5751	medium compact	103	3.9	VD	69
1226.7 + 5846	medium compact	94	3.2	VD	66
1226.9 + 5925	open	71	1.7	ED	50
1227.8 + 6232	open	114	4.0	VD	29
1228.9 + 5758	medium compact	70	1.5	ED	68
1229.3 + 5946	medium compact	152	3.4	VD	49
1229.8 + 5659	open	101	3.3	VD	67
1229.9 + 6153	medium compact	110	3.8	D	47
1230.1 + 5815	open	85	2.7	VD	65
1231.3 + 5848	medium compact	107	2.0	ED	1
1233.4 + 5706	compact	140	2.3	ED	8
1233.4 + 6038	open	119	3.4	VD	46
1234.8 + 6137	medium compact	85	1.9	ED	45
1235.3 + 5749	medium compact	139	3.7	VD	63
1235.8 + 5639	medium compact	150	3.0	D	7
1235.8 + 5836	medium compact	106	3.1	VD	64
1237.1 + 6008	compact	69	1.3	ED	44
1239.1 + 5854	compact	51	1.0	ED	60
1239.4 + 6014	medium compact	80	1.5	ED	41
1239.5 + 5804	medium compact	86	2.0	ED	62
1239.6 + 6102	compact	159	2.2	ED	43
1239.7 + 6027	compact	42	0.7	ED	42
1240.6 + 5720	medium compact	139	4.6	D	61
1242.0 + 5935	compact	62	1.0	ED	40
1242.1 + 6133	medium compact	93	2.4	VD	39
1242.5 + 5840	medium compact	142	3.6	VD	58
1242.5 + 5919	medium compact	87	1.8	ED	38
1244.7 + 5805	medium compact	64	2.1	ED	57
1244.7 + 6159	compact	111	1.9	ED	37
1244.8 + 5630	open	137	2.0	D	6
1245.0 + 5942	compact	146	3.3	VD	35
1246.3 + 5900	compact	58	1.3	ED	59
1246.6 + 6126	medium compact	101	2.7	ED	36
1247.9 + 5619	medium compact	91	1.9	VD	5
1248.0 + 6250	medium compact	141	5.2	MD	10

Cluster	Character	Population	Diameter in cm	Distance	Number on chart
1248.6 + 5919	medium compact	169	3.1	VD	19
1249.0 + 5720	medium compact	173	4.0	ED	33
1249.1 + 5820	open	139	4.0	ED	34
1252.3 + 5855	compact	108	2.0	ED	16
1252.4 + 5914	medium compact	57	1.6	ED	15
1253.6 + 5946	medium compact	87	2.7	ED	31
1253.8 + 5744	open	136	2.7	D	48
1253.9 + 6217	medium compact	94	2.3	D	32
1254.0 + 5829	compact	81	2.2	ED	17
1254.2 + 6042	compact	82	1.9	ED	13
1257.5 + 6015	compact	161	2.2	ED	14
1257.5 + 6046	medium compact	222	2.9	ED	12
1302.2 + 6243	open	174	14.0	Near	11

Average number of galaxies per cluster = 113.5

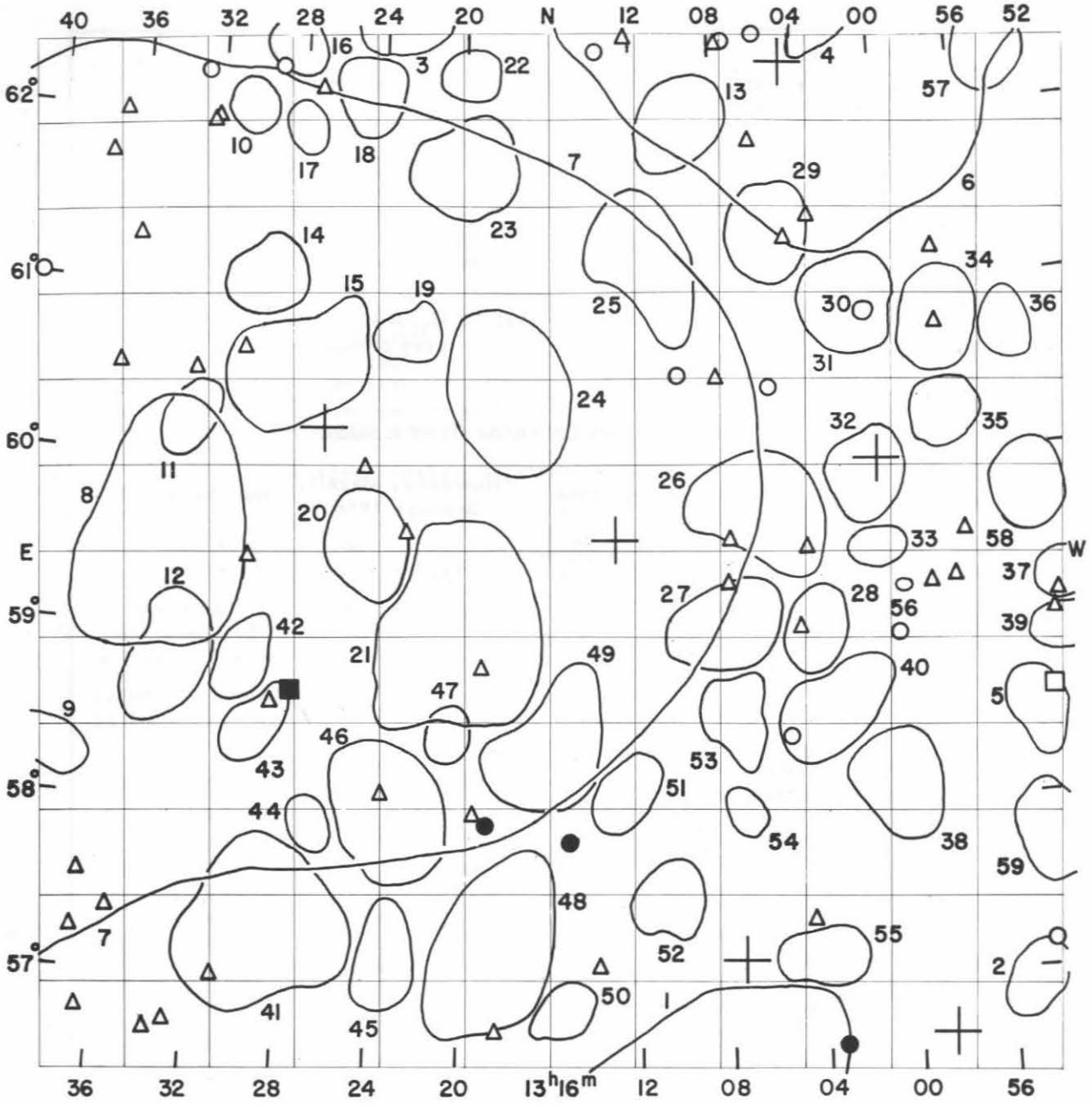
GALAXIES

Position α 1950 h m	Position δ o '	NGC IC*	m_p	V_s km/sec	Remarks
12 09.0	+ 59 01		15.4		
12 10.1	+ 58 43		15.7		
12 10.2	+ 62 14		15.7		
12 11.8	+ 59 53	4195	15.5		diffuse spiral
12 12.4	+ 60 10	4199	15.5		double system, bridge
12 13.2	+ 62 10		14.9		
12 13.5	+ 59 47		15.6		
12 14.0	+ 58 10		15.6		
12 15.5	+ 58 55		15.6		extremely compact
12 17.2	+ 57 01	4271	13.7		
12 17.8	+ 58 22	4284	14.7		
12 18.4	+ 58 22	4290	12.8		m_H = 12.7 S
12 18.7	+ 61 22		14.5		
12 19.3	+ 58 46		15.5		
12 20.6	+ 58 44	4335	13.7		
12 20.9	+ 57 45		15.7		
12 21.6	+ 58 40	4358+4364	14.3		double system
12 21.8	+ 58 38	4362	15.2		
12 22.0	+ 60 23		15.7		extremely compact
12 23.8	+ 58 35		15.3		disrupted
12 25.1	+ 57 12		15.4		
12 27.4	+ 57 06		14.6		
12 28.0	+ 57 04		15.6		
12 28.3	+ 57 35		15.3		
12 28.4	+ 57 34		14.9		
12 29.0	+ 58 15	4500	13.2		
12 29.8	+ 56 45	4511	14.6		
12 30.0	+ 56 56		14.3		
12 31.0	+ 58 14		15.7		
12 32.6	+ 59 12	4547+4549	15.3		double system, halo
12 37.7	+ 61 53	4605	10.8	+ 140	m_H = 10.9 Sc
12 38.8	+ 60 10		15.6		
12 39.0	+ 62 00		15.5		
12 39.8	+ 60 08		15.7		
12 41.1	+ 59 14	4652	15.5		
12 43.1	+ 61 59		15.6		
12 49.9	+ 60 48		15.6		

Position α 1950 h m	Position δ o '	NGC IC*	m_p	V_s km/sec	Remarks
12 50.3	+ 60 20		15.7		long jet
12 50.6	+ 59 32		15.7		
12 52.2	+ 59 10		15.0		
12 52.5	+ 59 02		14.4		
12 52.6	+ 59 09		15.1		
12 52.9	+ 59 03		15.5		
12 53.2	+ 58 36	4814	12.4	+ 2531	m_H = 12.3 Sb
12 54.0	+ 57 09		14.1		very compact nucleus

MAGNITUDES AND TYPES FROM OTHER SOURCES

NGC IC*	Bigay 1951		Pettit 1954		Humason, Mayall, Sandage 1956		Holmberg 1958	
4605	-	-	-	-	-	Sc	-	-
4814	-	-	-	-	12.7	Sb	-	-



FIELD No. 294

13^h16^m $+59^\circ30'$

Survey Plate No. 704

GC STARS

Nos.	R.A.	Decl.	m_p
	h m s	° ' "	
17664	12 58 35.3	+ 56 38 08	4.89
17702	13 00 37.5	+ 59 59 05	6.33
17780	13 04 24.6	+ 62 18 34	6.31
17831	13 07 30.3	+ 57 05 54	7.01
17945	13 12 56.9	+ 59 33 33	7.96
18226	13 26 37.1	+ 60 12 13	5.41

CLUSTERS OF GALAXIES

Cluster	Character	Population	Diameter in cm	Distance	Number on chart
1252.3 + 5855	compact	108	2.0	ED	39
1252.4 + 5914	medium compact	57	1.6	ED	37
1253.6 + 5946	medium compact	87	2.7	ED	58
1253.8 + 5744	open	136	2.7	D	59
1253.9 + 6217	medium compact	94	2.3	D	57
1254.0 + 5829	compact	81	2.2	ED	5
1254.2 + 6042	compact	82	1.9	ED	36
1255.2 + 5654	open	78	2.2	VD	2
1257.5 + 6015	compact	161	2.2	ED	35
1257.5 + 6046	medium compact	222	2.9	ED	34
1259.8 + 5913	compact	35	0.5	ED	56
1300.4 + 5805	medium compact	190	3.2	VD	38
1300.9 + 5929	medium compact	88	1.5	VD	33
1300.9 + 6050	compact	41	0.6	ED	30
1301.2 + 5954	open	120	2.6	ED	32
1301.8 + 6053	open	133	3.0	VD	31
1302.2 + 6243	open	174	14.0	Near	6
1302.4 + 6235	compact	64	2.0	VD	4
1303.3 + 5832	medium compact	220	3.2	ED	40
1303.9 + 5900	medium compact	68	2.4	VD	28
1304.2 + 5706	open	108	2.3	VD	55
1305.5 + 6119	open	148	2.9	ED	29
1306.0 + 5941	medium compact	185	3.9	ED	26
1307.3 + 5756	open	72	1.4	ED	54
1307.7 + 5829	open	128	2.3	ED	53
1307.8 + 5902	medium compact	198	3.2	ED	27
1309.7 + 6158	compact	176	3.0	ED	13
1310.9 + 5726	open	163	2.3	ED	52
1311.4 + 6109	medium compact	160	3.8	D	25
1312.6 + 5802	medium compact	102	2.3	ED	51
1313.0 + 5410	medium compact	623	27.3	Near	1
1315.4 + 5648	open	92	1.8	ED	50
1316.3 + 5818	medium compact	138	4.0	D	49
1317.9 + 6025	medium compact	187	4.6	D	24
1318.7 + 5709	medium compact	126	4.6	VD	48
1320.0 + 6142	open	120	3.3	D	23
1320.0 + 6215	compact	82	1.8	ED	22
1320.1 + 5858	open	144	6.0	MD	21
1320.6 + 5825	compact	89	1.6	ED	47
1322.6 + 6044	compact	80	1.8	VD	19
1323.1 + 5756	compact	163	4.0	D	46
1323.2 + 6248	medium compact	139	3.9	VD	3
1323.4 + 5704	medium compact	160	2.6	ED	45
1324.4 + 5931	open	148	3.0	ED	20
1324.7 + 6208	medium compact	63	2.2	ED	18
1326.7 + 5752	open	66	1.6	ED	44
1328.0 + 6031	open	80	4.1	D	15
1328.0 + 6156	medium compact	55	1.5	ED	17
1328.6 + 5715	open	113	5.2	D	41
1328.6 + 6224	open	70	1.9	ED	16
1329.5 + 5825	compact	112	2.1	ED	43
1329.6 + 6102	medium compact	99	2.4	ED	14
1329.9 + 5848	open	102	2.2	ED	42
1330.8 + 6203	compact	142	1.6	VD	10
1333.0 + 6012	medium compact	91	2.1	D	11
1333.4 + 5847	medium compact	82	3.3	D	12
1333.8 + 5931	compact	184	6.5	MD	8

Cluster	Character	Population	Diameter in cm	Distance	Number on chart
1339.1 + 5815	medium compact	110	2.5	VD	9
1341.0 + 5930	open	560	35.3	Near	7

Average number of galaxies per cluster = 133.9

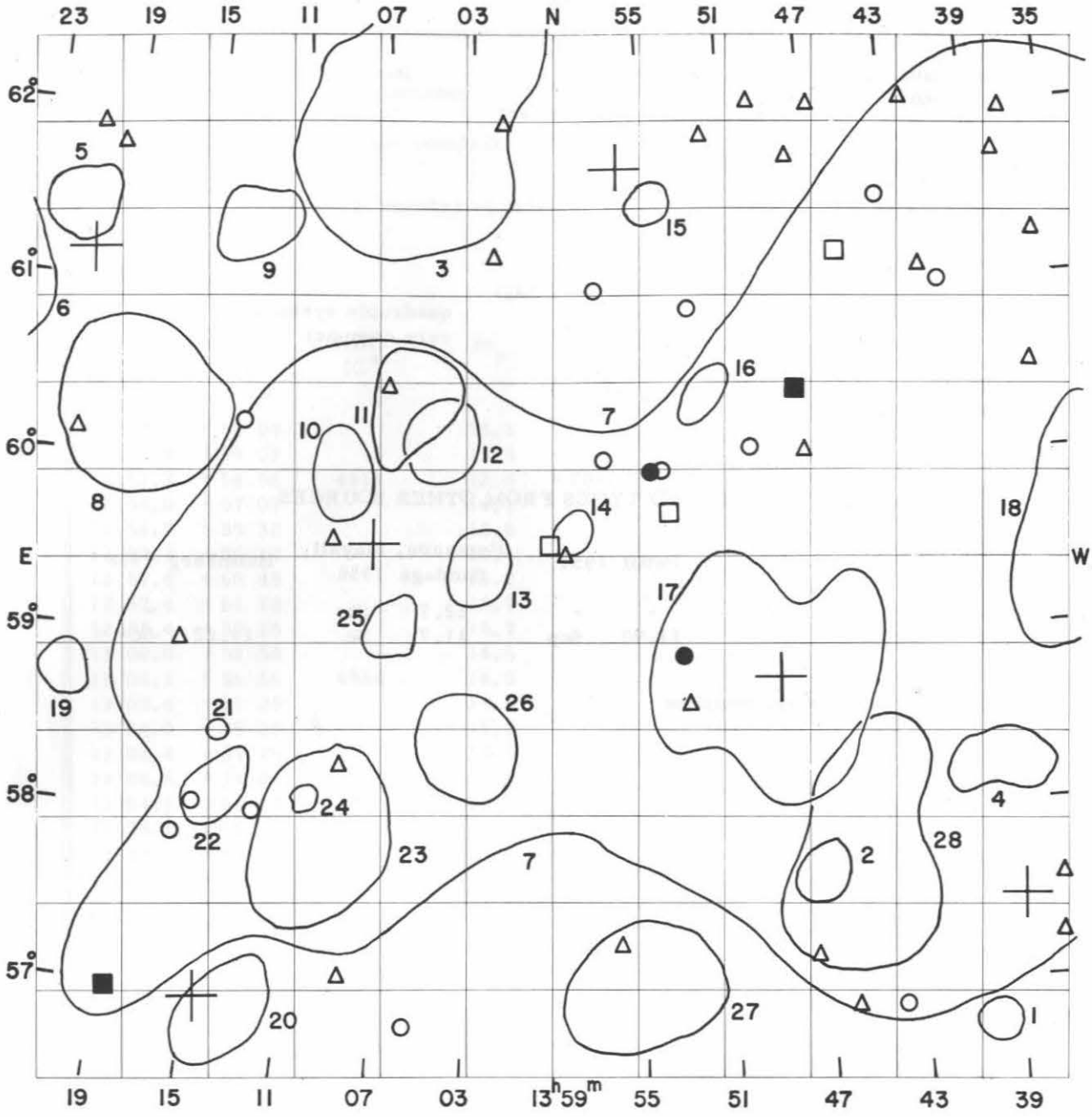
GALAXIES

Position α 1950 h m	Position δ o '	NGC IC*	m_p	V_s km/sec	Remarks
12 52.6	+ 59 09		15.1		
12 52.9	+ 59 03		15.5		
12 53.2	+ 58 36	4814	12.4	+ 2531	m_H = 12.3 Sb
12 54.0	+ 57 09		14.1		very compact nucleus
12 56.7	+ 59 32		15.6		
12 57.3	+ 59 17		15.4		
12 57.4	+ 60 45		15.2		
12 57.4	+ 61 12		15.7		
12 58.4	+ 59 15		15.7		
13 00.0	+ 58 58		14.6		
13 03.2	+ 56 36	4964	14.0		
13 03.4	+ 61 25		15.4		multiple system
13 04.0	+ 59 29		15.5		
13 04.4	+ 57 20		15.5		
13 04.5	+ 59 01		15.3		
13 04.6	+ 61 18		15.6		
13 05.1	+ 58 24		14.8		
13 05.6	+ 60 25	852*	14.8		
13 05.7	+ 62 29		14.3		
13 06.2	+ 61 50		15.4		
13 07.3	+ 62 26	5007	14.2		
13 07.6	+ 59 33		15.4		
13 07.6	+ 62 25		15.6		
13 07.7	+ 59 17		15.3		
13 08.0	+ 60 29		15.6		
13 09.8	+ 60 30		15.0		
13 12.3	+ 62 28		15.7		
13 13.6	+ 62 23		14.4		double system, bridge + streamers
13 13.8	+ 57 05		15.4		
13 15.1	+ 57 48	875*	13.9		
13 18.3	+ 56 43		15.7		
13 18.9	+ 57 55	5109	13.6		
13 19.1	+ 58 48		15.4		
13 19.4	+ 57 58	5113	15.2		
13 22.7	+ 59 35		15.7		
13 23.5	+ 58 05		15.6		extremely diffuse spiral
13 24.7	+ 59 59		15.6		
13 27.3	+ 62 10		15.5		
13 27.7	+ 58 40	5204	11.7	+ 272	m_H = 12.2 Sc
13 28.6	+ 58 35		15.7		
13 29.3	+ 62 17		14.9		
13 29.9	+ 59 26		15.1		
13 30.5	+ 60 39		15.5		
13 30.7	+ 57 00		15.6		
13 32.4	+ 61 59		15.5		
13 32.6	+ 56 44		15.3		
13 32.6	+ 61 57		15.6		
13 32.8	+ 60 31		15.7		

Position α 1950 h m	Position δ ° ′	NGC IC*	m_p	V_s km/sec	Remarks
13 33.0	+ 62 15		14.1		
13 33.5	+ 56 40		15.4		
13 35.5	+ 57 22	5255	15.3		
13 35.9	+ 61 17		15.2		
13 36.5	+ 56 47		15.5		
13 36.5	+ 60 32		15.1		
13 36.8	+ 57 34		15.7		quadruple system
13 37.0	+ 57 15		15.3		very compact
13 37.0	+ 62 00		15.7		
13 37.6	+ 61 45		15.2		
13 40.6	+ 61 02		14.5		

MAGNITUDES AND TYPES FROM OTHER SOURCES

NGC IC*	Bigay 1951		Pettit 1954		Humason, Mayall, Sandage 1956		Holmberg 1958	
4814	-	-	-	-	12.7	Sb	-	-
5204	-	-	11.90	Scp	11.7	Sc	11.62	Sc+



FIELD No. 295

13^h59^m $+59^o30'$

Survey Plate No. 705

GC STARS

Nos.	R.A.	Decl.	m_p
	h m s	o ' "	
18496	13 38 31.7	+ 57 27 35	6.14
18716	13 48 44.6	+ 58 47 11	6.36
18893	13 55 58.8	+ 61 43 58	6.40
19109	14 07 13.1	+ 59 34 26	6.50
19267	14 14 22.9	+ 56 55 18	6.60
19406	14 21 05.4	+ 61 11 37	7.23

CLUSTERS OF GALAXIES

Cluster	Character	Population	Diameter in cm	Distance	Number on chart
1333.8 + 5931	compact	184	6.5	MD	18
1339.1 + 5815	medium compact	110	2.5	VD	4
1339.9 + 5646	compact	61	1.3	ED	1
1341.0 + 5930	open	560	35.3	Near	7
1345.3 + 5744	open	116	6.0	D	28
1347.2 + 5739	compact	146	1.8	ED	2
1349.2 + 5847	medium compact	184	7.3	MD	17
1351.9 + 6027	open	66	1.5	ED	16
1354.6 + 6132	compact	78	1.3	ED	15
1354.8 + 5700	medium compact	122	4.5	D	27
1358.1 + 5939	compact	70	1.2	ED	14
1402.3 + 5925	medium compact	81	2.2	VD	13
1402.8 + 5823	open	130	3.4	VD	26
1404.2 + 6010	medium compact	107	2.4	ED	12
1405.4 + 6022	compact	118	3.2	D	11
1405.6 + 6202	medium compact	328	8.1	D	3
1406.2 + 5905	medium compact	79	1.8	VD	25
1408.6 + 5956	medium compact	190	2.3	VD	10
1409.3 + 5751	medium compact	147	5.0	MD	23
1409.8 + 5805	medium compact	60	0.9	ED	24
1413.1 + 5649	medium compact	115	3.1	D	20
1413.4 + 6122	compact	64	2.4	VD	9
1413.9 + 5806	medium compact	172	2.2	VD	22
1413.9 + 5826	compact	36	0.6	ED	21
1418.3 + 6016	open	177	5.4	D	8
1421.0 + 5846	compact	68	1.6	VD	19
1422.0 + 6126	medium compact	62	2.2	ED	5
1431.9 + 6020	open	178	13.4	Near	6

Average number of galaxies per cluster = 136.0

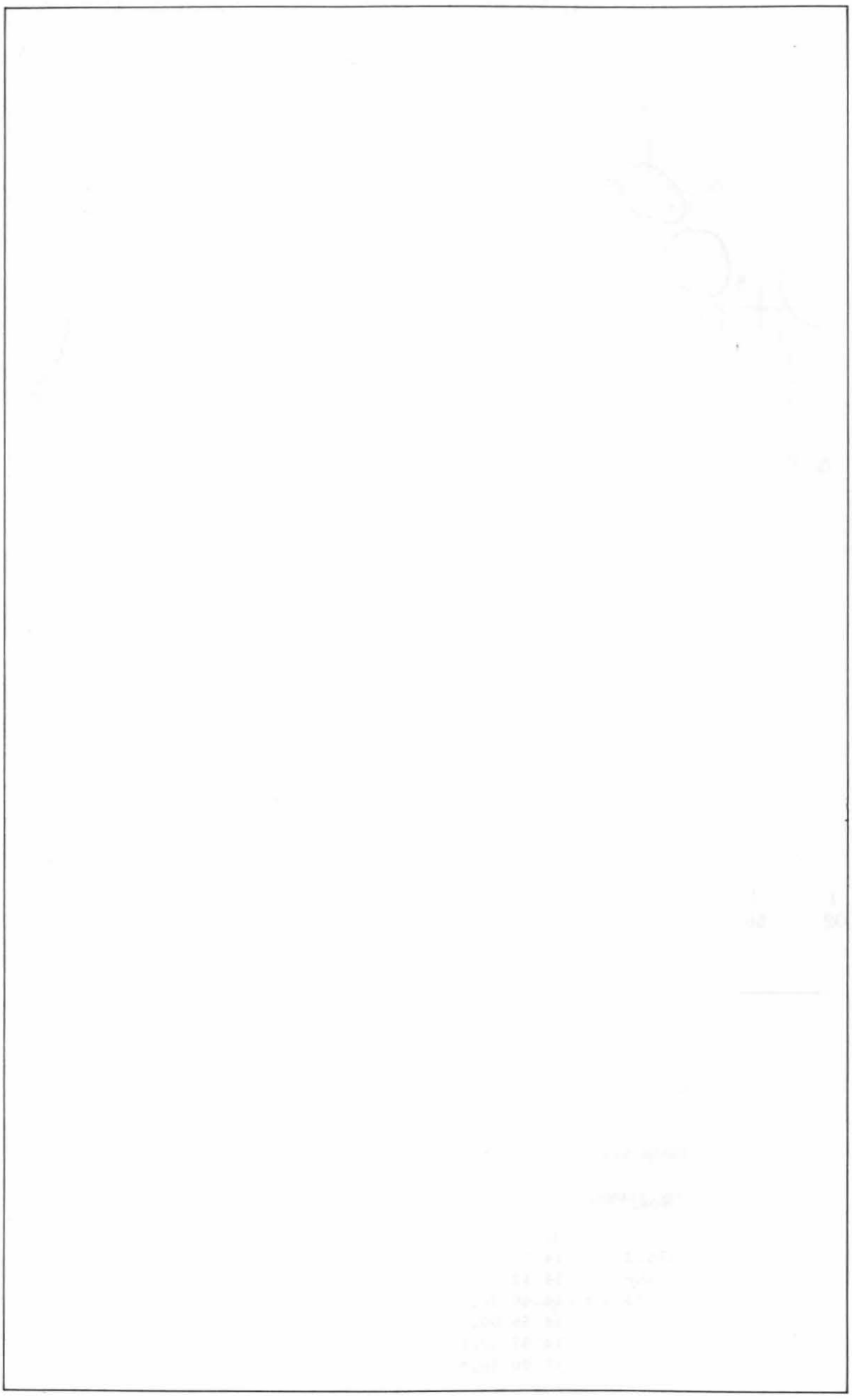
GALAXIES

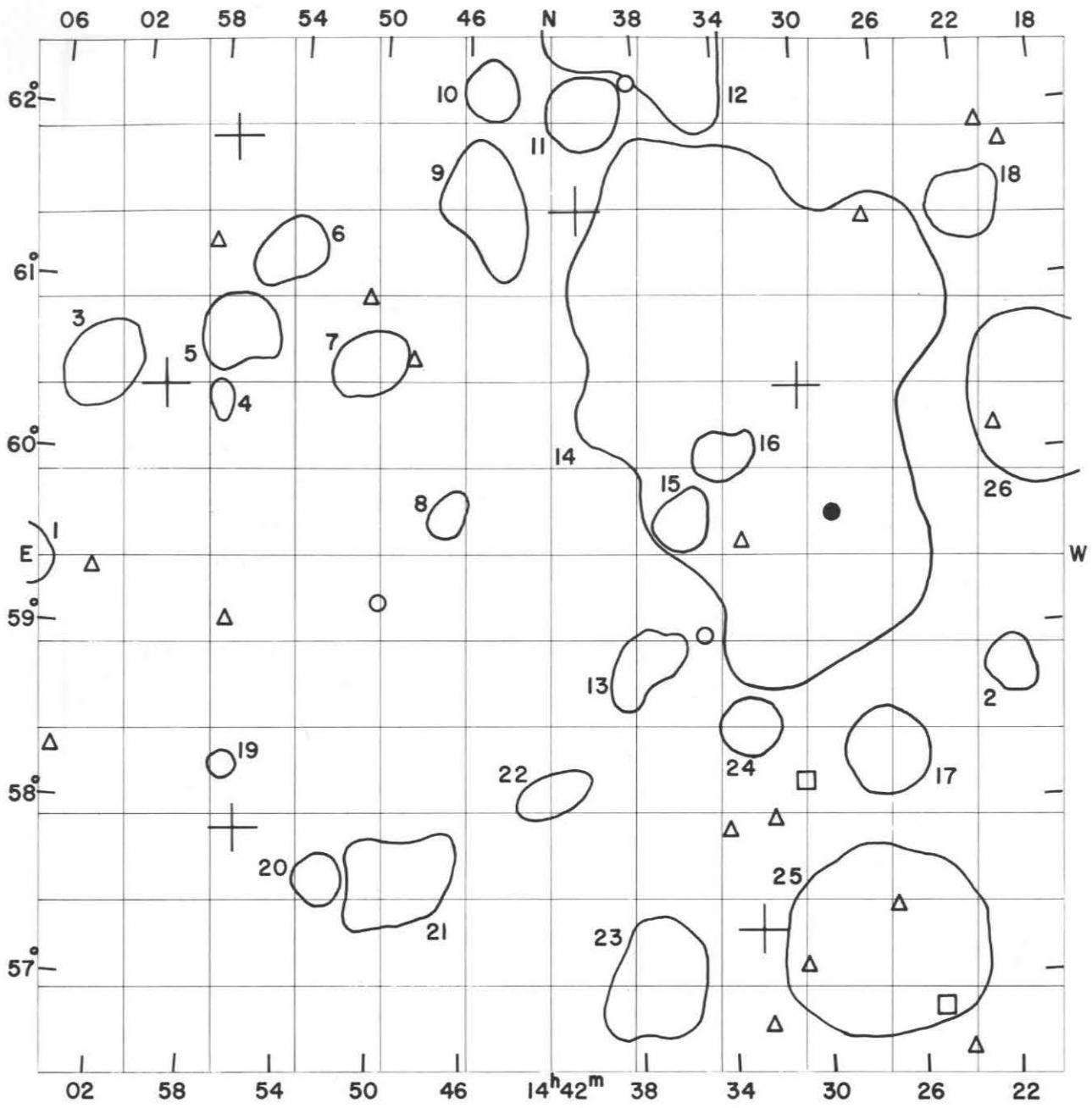
Position α 1950 h m	Position δ 1950 ° ′	NGC IC*	m_p	V_s km/sec	Remarks
13 35.9	+ 61 17		15.2		
13 36.5	+ 60 32		15.1		
13 36.8	+ 57 34		15.7		quadruple system
13 37.0	+ 57 15		15.3		very compact
13 37.0	+ 62 00		15.7		
13 37.6	+ 61 45		15.2		
13 40.6	+ 61 02		14.5		
13 41.4	+ 61 07		15.6		
13 41.8	+ 62 03		15.6		
13 43.3	+ 61 30		15.0		
13 43.8	+ 56 52		14.8		
13 45.4	+ 61 13	5308	12.5	+ 2041	m_H = 12.8 E
13 45.9	+ 56 53		15.3		
13 46.5	+ 62 03		15.2		
13 47.3	+ 60 05		15.3		
13 47.5	+ 57 11		15.4		compact
13 47.6	+ 60 26	5322	11.3	+ 1902	m_H = 11.6 E
13 47.7	+ 61 46		15.7		
13 49.5	+ 62 05		15.5		
13 49.8	+ 60 07	5342	14.4		

Position α 1950 h m	Position δ o '	NGC IC*	m_p	V_s km/sec	Remarks
13 51.8	+ 61 54		15.6		
13 52.5	+ 60 55	5370	14.3		
13 52.8	+ 58 39		15.7		
13 53.1	+ 58 55	5372	13.7		
13 53.6	+ 59 45	5376	12.9		m_H = 13.0
13 54.0	+ 59 59	5379	14.1		
13 54.5	+ 59 59	5389	13.2		
13 56.0	+ 57 15		15.6		extremely diffuse spiral
13 56.6	+ 60 03	5402	14.6		
13 57.0	+ 61 01		14.7		
13 58.4	+ 59 30		15.5		very compact
13 59.1	+ 59 33	5430	12.7		m_H = 12.8 SB
14 01.5	+ 61 59		15.5		
14 01.8	+ 61 13		15.6		
14 05.4	+ 56 47		15.0		
14 06.7	+ 60 28		15.6		
14 08.2	+ 57 03		15.4		
14 08.4	+ 58 16		15.7		compact
14 09.0	+ 59 35		15.7		
14 12.3	+ 58 00	5526	14.2		double system
14 13.4	+ 60 14	5540	14.9		
14 15.0	+ 58 02	995*	14.5		
14 15.8	+ 57 51	996*	14.6		
14 15.8	+ 58 58	5561	15.5		
14 18.2	+ 56 57	5585	11.7	+ 304	m_H = 12.0 Sc
14 20.0	+ 61 48		15.7		triple system
14 21.1	+ 61 55		15.5		
14 21.2	+ 60 10		15.3		very compact

MAGNITUDES AND TYPES FROM OTHER SOURCES

NGC IC*	Bigay 1951		Pettit 1954		Humason, Mayall, Sandage 1956		Holmberg 1958	
5308	-	-	12.33	S0	12.2	S0	-	-
5322	11.5	E3	11.01	E4	11.0	E4	-	-
5585	-	-	11.54	Sc	11.5	Sc	11.25	Sc+





FIELD No. 296

14^h42^m $+59^o30'$

Survey Plate No. 1425

GC STARS

Nos.	R.A.	Decl.	m_p
	h m s	o ' "	
19613	14 30 21.2	+ 60 26 43	6.18
19666	14 32 45.2	+ 57 17 12	6.25
19825	14 40 48.2	+ 61 28 28	6.17
20151	14 56 00.9	+ 57 50 57	7.13
20180	14 57 32.8	+ 61 51 54	7.04
20233	15 00 16.6	+ 60 24 01	5.89

CLUSTERS OF GALAXIES

Cluster	Character	Population	Diameter in cm	Distance	Number on chart
1418.3 + 6016	open	177	5.4	D	26
1421.0 + 5846	compact	68	1.6	VD	2
1422.0 + 6126	medium compact	62	2.2	ED	18
1426.9 + 5818	medium compact	90	2.6	ED	17
1427.4 + 5713	compact	119	6.3	D	25
1431.9 + 6020	open	178	13.4	Near	14
1433.0 + 5830	medium compact	75	1.8	VD	24
1434.0 + 6003	medium compact	83	1.7	ED	16
1436.0 + 5940	medium compact	79	1.8	ED	15
1437.3 + 5701	open	110	3.4	D	23
1437.4 + 6225	open	142	4.7	D	12
1437.8 + 5850	compact	104	2.1	ED	13
1440.6 + 6202	medium compact	98	2.3	VD	11
1441.9 + 5806	compact	54	1.7	ED	22
1445.0 + 6209	medium compact	59	1.6	ED	10
1445.1 + 6129	open	110	3.1	VD	9
1446.8 + 5942	compact	59	1.2	ED	8
1448.7 + 5735	medium compact	97	3.2	D	21
1450.7 + 6034	compact	111	2.2	ED	7
1452.2 + 5735	compact	80	1.5	ED	20
1454.7 + 6112	medium compact	98	2.1	ED	6
1456.8 + 5814	medium compact	43	0.8	ED	19
1457.0 + 6045	medium compact	117	2.5	VD	5
1457.6 + 6020	medium compact	55	0.9	ED	4
1503.6 + 6030	open	86	2.5	VD	3
1506.5 + 5921	medium compact	79	1.9	ED	1

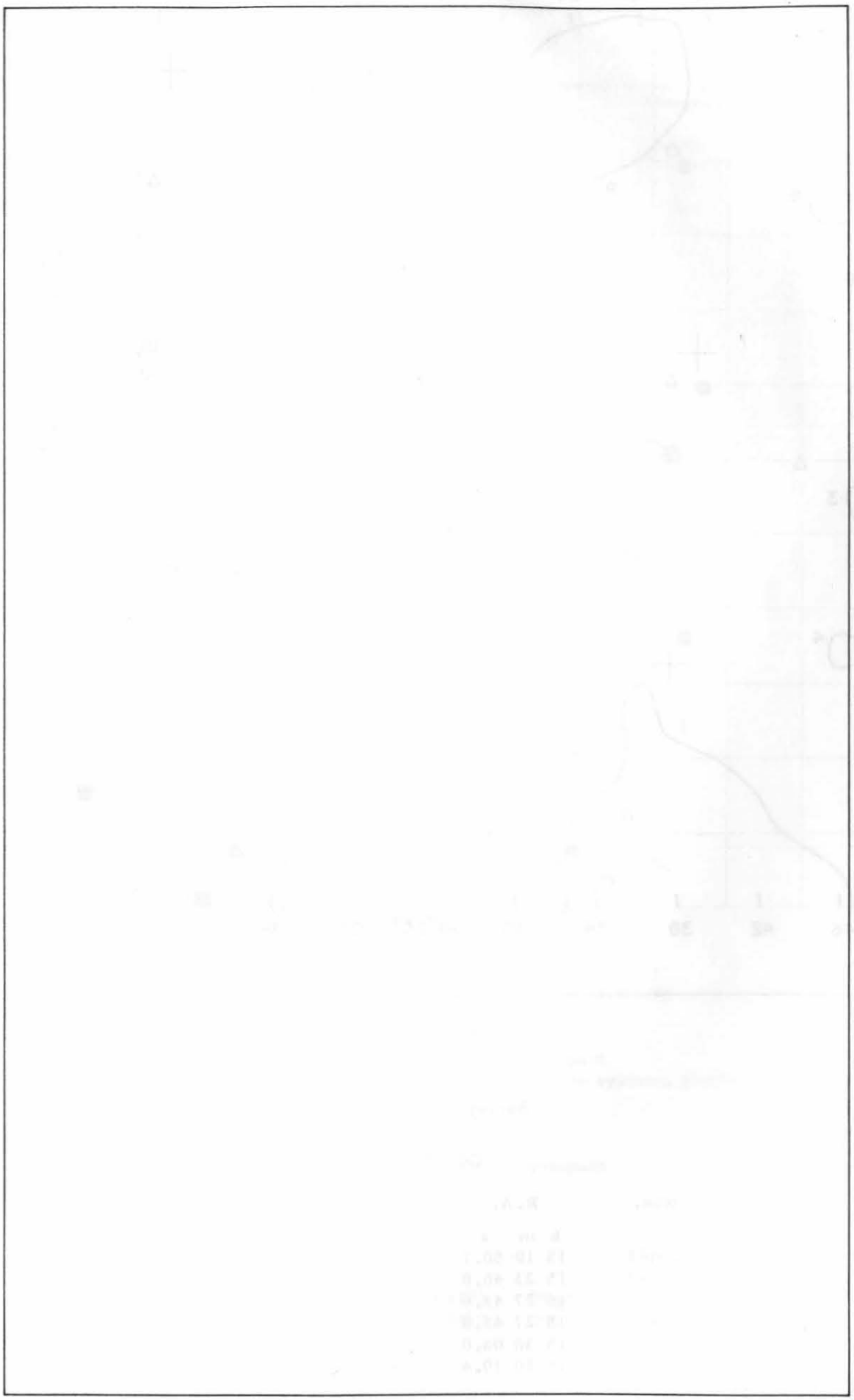
Average number of galaxies per cluster = 93.6

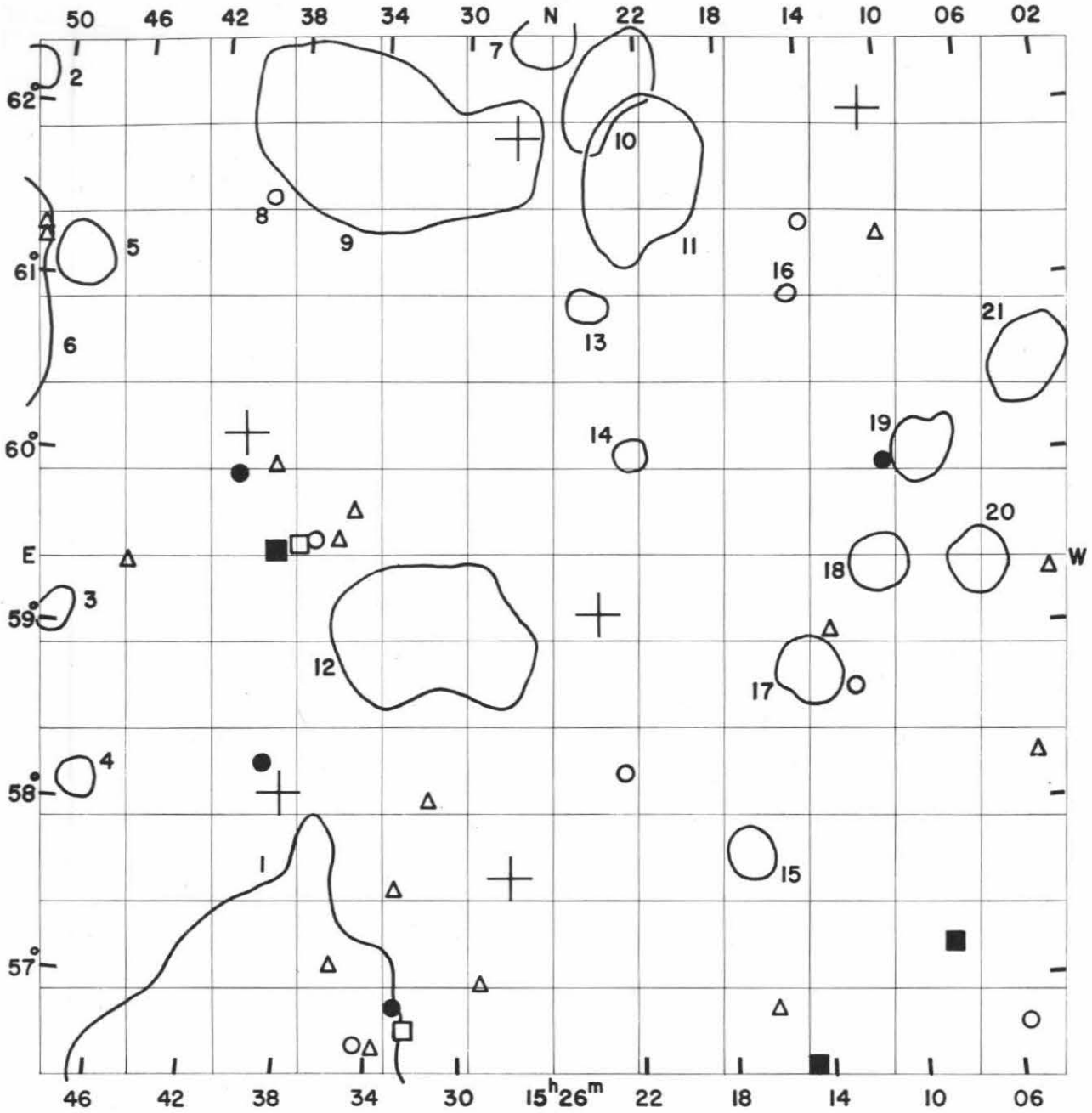
GALAXIES

Position α 1950 h m	Position δ 1950 o '	NGC IC*	m_p	V_s km/sec	Remarks
14 20.0	+ 61 48		15.7		triple system
14 21.1	+ 61 55		15.5		
14 21.2	+ 60 10		15.3		very compact
14 23.8	+ 56 33		15.4		extremely diffuse spiral
14 25.0	+ 56 49	5631	12.4	+ 1979	m_H = 12.5 Sa
14 26.7	+ 57 25		15.4		
14 26.9	+ 61 25		15.3		double system, jet
14 29.0	+ 59 42	5667	13.1		
14 30.6	+ 58 09	5678	12.1	+ 2300	m_H = 12.1 Sc
14 30.8	+ 57 05		15.6		extremely compact
14 32.0	+ 57 56		15.7		
14 32.3	+ 56 45		15.6		
14 33.2	+ 59 34		15.5		very diffuse spiral
14 34.0	+ 57 52		15.6		
14 34.9	+ 59 01		14.3		very compact, halo
14 38.3	+ 62 13	1049*	14.8		
14 48.5	+ 60 35		15.3		
14 50.0	+ 59 10	5777	14.2		
14 50.6	+ 60 56		15.4		
14 56.8	+ 59 04		15.5		very diffuse spiral
14 58.2	+ 61 14		15.7		
15 03.1	+ 59 19		15.7		
15 04.3	+ 58 16		15.6		

MAGNITUDES AND TYPES FROM OTHER SOURCES

NGC IC*	Bigay 1951		Pettit 1954		Humason, Mayall, Sandage 1956		Holmberg 1958	
5631	-	-	-	-	12.6	S0	-	-
5678	-	-	-	-	-	Sc	-	-





FIELD No. 297

15^h26^m $+59^\circ30'$

Survey Plate No. 755

GC STARS

Nos.	R.A.	Decl.	m_p
	h m s	° ' "	
20465	15 10 50.7	+ 62 02 33	7.34
20747	15 23 48.8	+ 59 08 26	3.47
20835	15 27 42.6	+ 57 36 49	6.92
20836	15 27 43.8	+ 61 53 52	6.79
21076	15 38 03.0	+ 58 05 07	6.46
21119	15 40 19.4	+ 60 08 41	8.4

CLUSTERS OF GALAXIES

Cluster	Character	Population	Diameter in cm	Distance	Number on chart
1503.6 + 6030	open	86	2.5	VD	21
1506.5 + 5921	medium compact	79	1.9	ED	20
1508.9 + 6000	compact	113	2.0	ED	19
1511.1 + 5924	compact	110	1.9	ED	18
1514.4 + 5847	open	87	2.1	ED	17
1514.9 + 6058	compact	45	0.5	ED	16
1517.3 + 5745	compact	78	1.4	ED	15
1521.7 + 6140	medium compact	130	4.4	D	11
1522.5 + 6004	compact	69	1.0	ED	14
1523.5 + 6211	medium compact	106	2.9	VD	10
1524.5 + 6055	medium compact	73	1.1	ED	13
1526.5 + 6228	medium compact	68	1.9	VD	7
1531.4 + 5901	medium compact	128	5.3	MD	12
1534.0 + 6150	open	141	6.8	D	9
1539.6 + 6130	compact	40	0.4	ED	8
1540.3 + 5557	medium compact	401	13.0	MD	1
1547.1 + 5805	open	58	1.2	ED	4
1548.6 + 6107	open	72	1.9	ED	5
1548.7 + 5903	medium compact	87	1.2	ED	3
1551.9 + 6210	compact	94	1.4	ED	2
1552.6 + 6044	open	118	5.3	MD	6

Average number of galaxies per cluster = 104.0

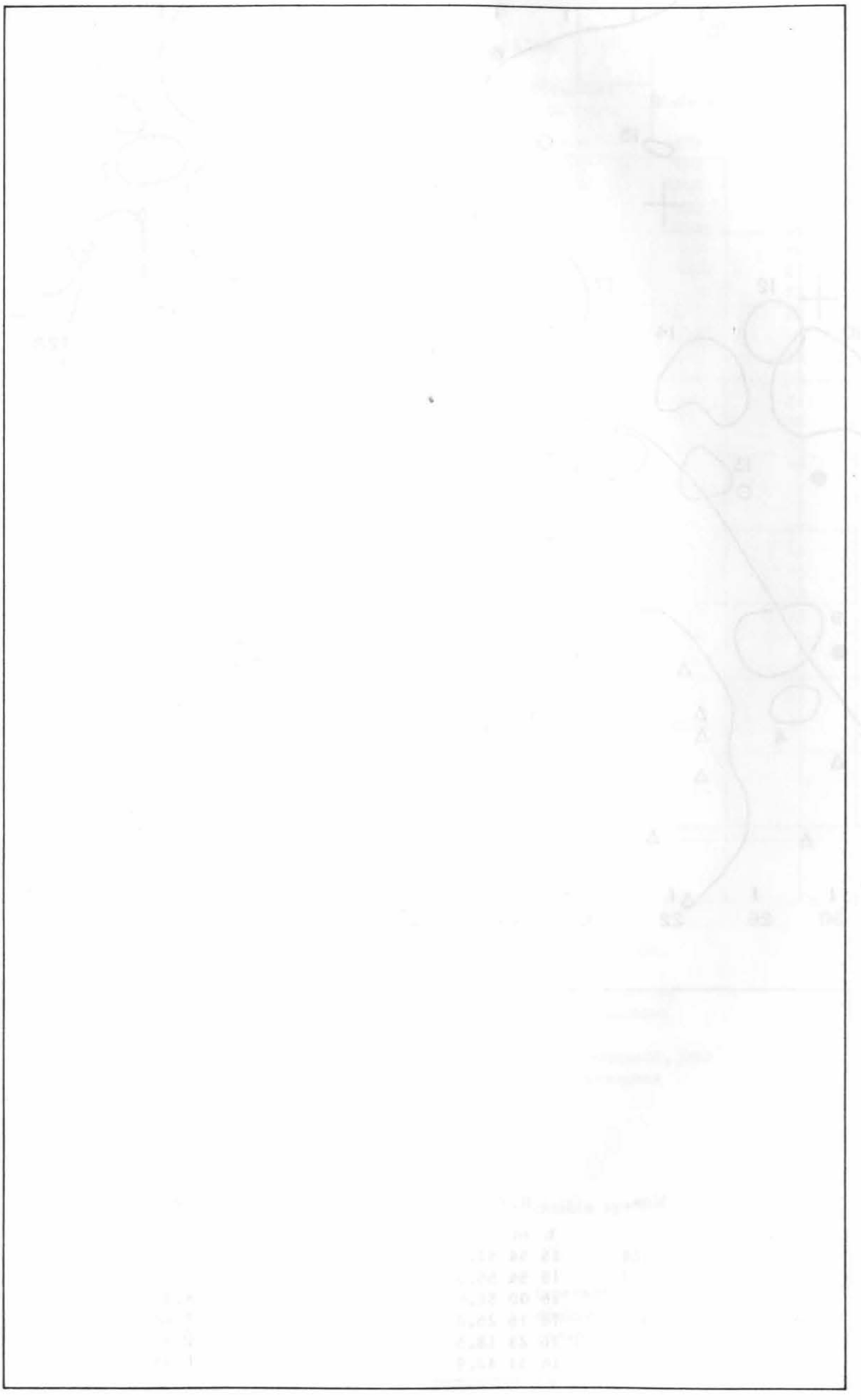
GALAXIES

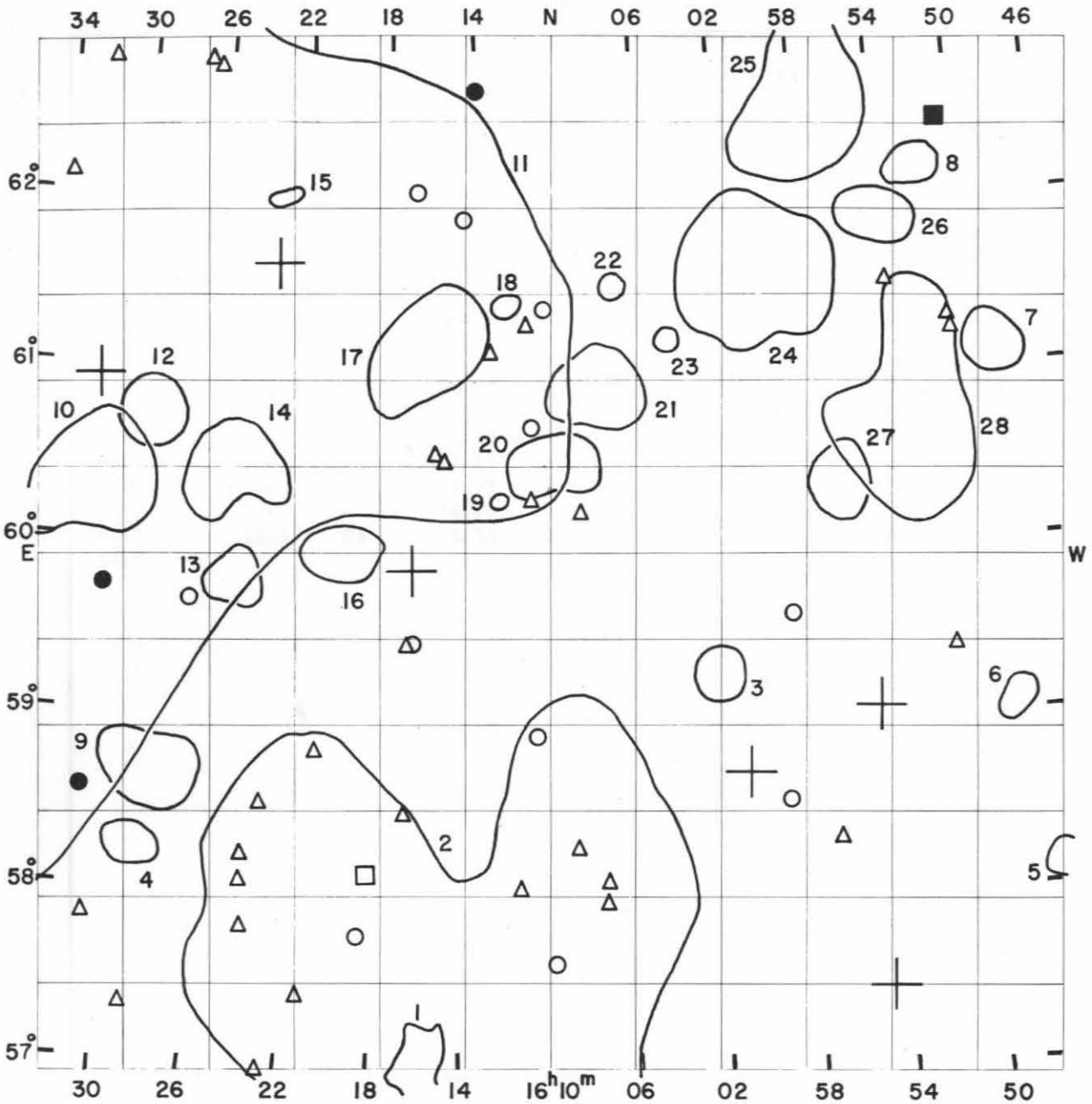
Position α 1950 h m	Position δ 1950 o '	NGC IC*	m_p	V_s km/sec	Remarks
15 03.1	+ 59 19		15.7		
15 04.3	+ 58 16		15.6		
15 05.6	+ 56 44	1099*	15.0		
15 08.4	+ 57 12	5879	11.9	+ 876	m_H = 12.1 Sb
15 10.2	+ 61 19		15.3		
15 10.6	+ 60 00	5894	13.2		
15 12.3	+ 58 42		15.0		
15 13.3	+ 59 02		15.5		
15 14.0	+ 61 23		14.8		
15 14.6	+ 56 30	5906+5907	11.4	+ 538	m_H = 11.8 Sc
15 16.1	+ 56 51		15.1		
15 22.6	+ 58 14		14.6		
15 29.0	+ 57 00		15.7		compact
15 31.3	+ 58 03		15.5		double system, plume
15 32.3	+ 56 45	5963	13.0		
15 32.8	+ 56 52	5965	13.4		
15 32.8	+ 57 32		15.6		
15 33.7	+ 56 38	5969	15.4		compact
15 34.4	+ 56 39	5971	14.9		
15 35.0	+ 59 44		15.4		
15 35.6	+ 57 06		15.7		
15 35.6	+ 59 33	5976	15.7		
15 36.8	+ 59 33	5981	14.2		
15 37.6	+ 59 31	5982	12.4	+2923	m_H = 12.5 E
15 38.6	+ 59 30	5985	12.0	+2467	m_H = 12.2 Sb
15 38.8	+ 58 15	5987	13.3		
15 38.8	+ 59 59		15.6		

Position α 1950 h m	Position δ o '	NGC IC*	m_p	V_s km/sec	Remarks
15 40.5	+ 59 55	5989	13.6		
15 45.4	+ 59 22		15.7		
15 50.4	+ 61 13		15.2		double system
15 50.5	+ 61 18		15.6		

MAGNITUDES AND TYPES FROM OTHER SOURCES

NGC IC*	Bigay 1951		Pettit 1954		Humason, Mayall, Sandage 1956		Holmberg 1958	
5879	-	-	11.98	Sb	11.9	Sb	-	-
5907	-	-	11.19	Sb	11.0	Sb	11.04	Sb+
5976	-	-	15.95	S0	-	-	-	-
5981	-	-	14.20	Sab	-	-	-	-
5982	12.3	E3	12.33	E4	12.4	E4	-	-
5985	-	-	-	-	11.9	Sb	-	-





FIELD No. 298

16^h10^m $+60^\circ00'$

Survey Plate No. 1100

GC STARS

Nos.	R.A.	Decl.	m_p
	h m s	° ′ ″	
21424	15 54 51.2	+ 59 03 19	6.17
21427	15 54 55.6	+ 57 25 36	8.8
21572	16 00 56.9	+ 58 41 53	4.11
21943	16 16 25.0	+ 59 52 32	5.64
22101	16 23 18.5	+ 61 37 37	2.89
22281	16 31 42.9	+ 60 55 39	5.85

CLUSTERS OF GALAXIES

Cluster	Character	Population	Diameter in cm	Distance	Number on chart
1547.1 + 5805	open	58	1.2	ED	5
1548.6 + 6107	open	72	1.9	ED	7
1548.7 + 5903	medium compact	87	1.2	ED	6
1551.9 + 6210	compact	94	1.4	ED	8
1552.6 + 6044	open	118	5.3	MD	28
1553.9 + 6154	open	86	2.2	VD	26
1556.4 + 6023	open	87	2.1	ED	27
1557.4 + 6235	open	111	4.5	D	25
1600.2 + 6135	medium compact	158	5.1	MD	24
1602.3 + 5917	compact	70	1.6	ED	3
1604.4 + 6113	compact	61	0.7	ED	23
1607.0 + 6132	compact	60	0.8	ED	22
1607.6 + 6055	medium compact	87	2.8	VD	21
1609.8 + 6031	medium compact	187	2.5	ED	20
1612.2 + 6125	compact	51	0.9	ED	18
1612.4 + 6018	compact	37	0.4	ED	19
1613.8 + 5632	open	393	19.7	Near	2
1615.7 + 5700	medium compact	107	2.1	VD	1
1615.9 + 6110	compact	83	3.6	VD	17
1619.8 + 5959	compact	96	2.2	ED	16
1623.1 + 6201	compact	55	0.8	ED	15
1624.7 + 5948	open	56	1.7	ED	13
1625.1 + 6025	medium compact	121	3.0	VD	14
1628.3 + 5840	medium compact	84	2.7	VD	9
1628.9 + 5815	medium compact	60	1.6	ED	4
1629.0 + 6045	medium compact	87	2.1	VD	12
1631.9 + 6021	compact	111	3.9	D	10
1638.4 + 6038	open	510	30.6	Near	11

Average number of galaxies per cluster = 113.8

GALAXIES

Position α 1950 h m	Position δ 1950 ° ′	NGC IC*	m_p	V_s km/sec	Remarks
15 50.4	+ 61 13		15.2		double system
15 50.5	+ 61 18		15.6		
15 50.6	+ 62 27	6015	11.7	+ 689	m_H = 12.1 Sc
15 51.2	+ 59 24		15.6		double system
15 53.6	+ 61 31		15.7		
15 56.9	+ 58 18		15.1		very compact, jets
15 58.8	+ 59 37		15.0		very compact
15 59.2	+ 58 32		14.8		
16 07.3	+ 57 58		15.6		
16 07.3	+ 58 05		15.4		
16 08.5	+ 60 13		15.6		
16 08.6	+ 58 16		15.6		
16 09.7	+ 57 36	6088	14.7		double system
16 10.3	+ 61 24	6095	14.5		
16 10.5	+ 58 55		15.0		
16 10.8	+ 60 17		15.3		
16 10.9	+ 60 43		14.5		interacting double system
16 11.1	+ 61 18		15.4		double system
16 11.2	+ 58 01		15.7		compact
16 12.9	+ 61 09		15.7		

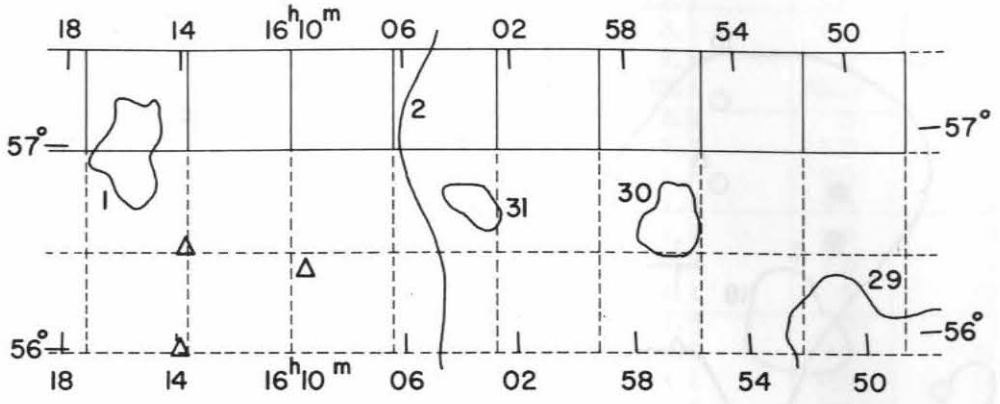
Position α 1950 h m	Position δ o '	NGC IC*	m_p	V_s km/sec	Remarks
16 13.9	+ 62 40	1210*	13.8		
16 14.3	+ 61 54		14.9		
16 15.0	+ 60 30		15.7		
16 15.4	+ 60 33		15.5		
16 16.4	+ 59 27		14.8		
16 16.5	+ 58 28		15.4		
16 16.5	+ 59 27		15.7		
16 16.6	+ 62 04	6123	14.4		
16 18.2	+ 58 06	6127=6128	13.0		
16 18.5	+ 57 45	6130	14.2		
16 20.6	+ 58 49		15.4		
16 21.1	+ 57 24		15.2		
16 22.7	+ 56 58		15.7		compact
16 23.0	+ 58 30		15.5		
16 23.6	+ 57 48		15.6		
16 23.8	+ 58 03		15.7		
16 23.8	+ 58 13		15.6		
16 26.7	+ 59 41	6176	14.8		
16 26.7	+ 62 46		15.5		
16 27.2	+ 62 47		15.3		
16 28.8	+ 57 19		15.7		compact
16 30.6	+ 57 49	6187	15.1		
16 30.8	+ 59 45	6189	13.3		
16 31.2	+ 58 33	6190	13.2		
16 32.2	+ 62 46		15.5		extremely diffuse spiral
16 33.8	+ 62 05		15.7		

MAGNITUDES AND TYPES FROM OTHER SOURCES

NGC IC*	Bigay 1951		Pettit 1954		Humason, Mayall, Sandage 1956		Holmberg 1958	
6015	-	-	11.65	Sc	11.6	Sc	11.69	Sc+

An area of about 1.5 square degrees, near the SW corner of this field, is not covered by any of the neighboring fields. It is depicted in the following special map together with some of its surroundings. Separate lists for this map are given below.

SPECIAL MAP

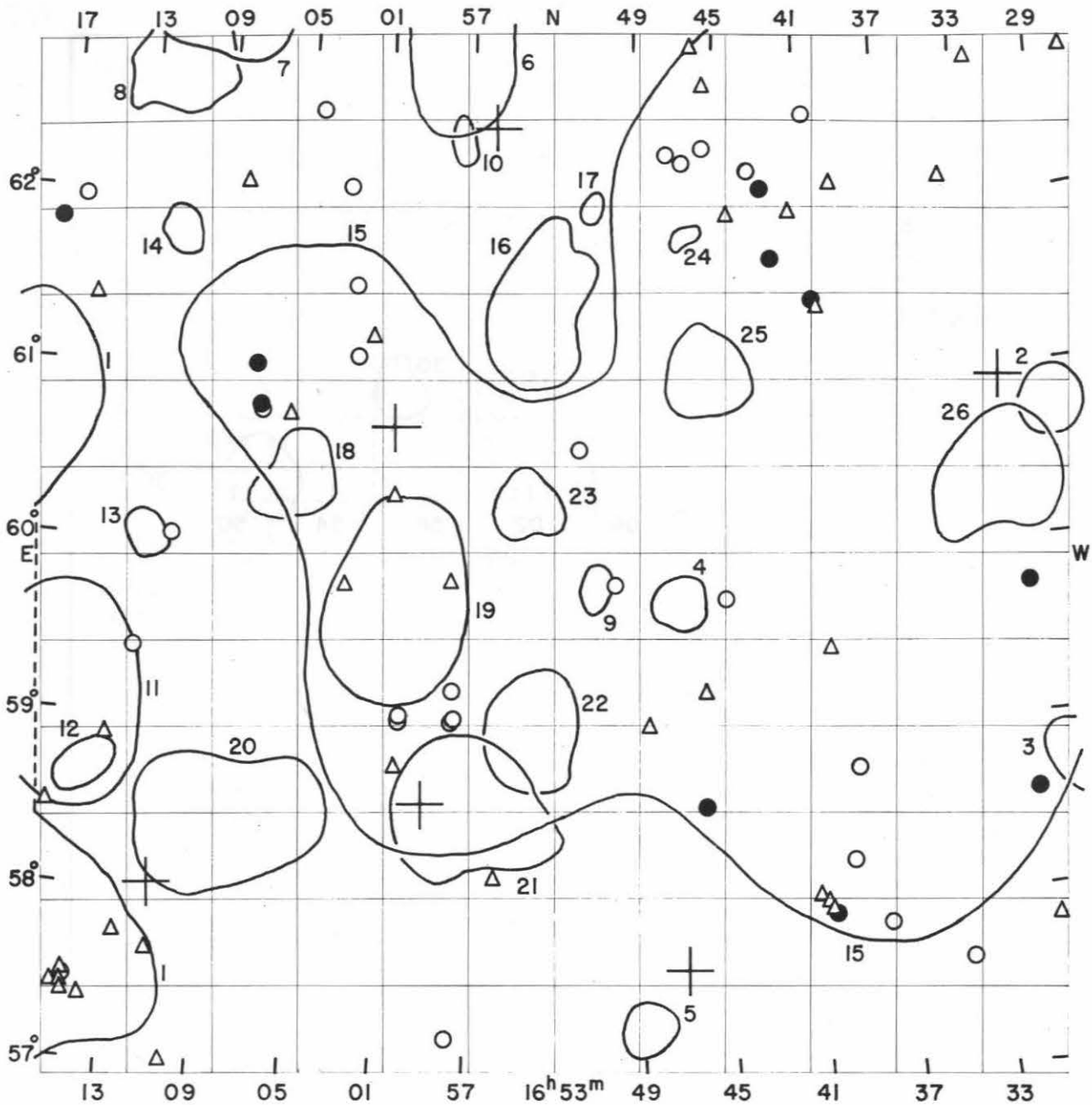


CLUSTERS OF GALAXIES

Cluster	Character	Population	Diameter in cm	Distance	Number on chart
1550.2 + 5550	medium compact	121	4.4	VD	29
1556.6 + 5635	medium compact	83	1.6	ED	30
1603.5 + 5642	compact	60	1.2	ED	31
1613.8 + 5632	open	393	19.7	Near	2
1615.7 + 5700	medium compact	107	2.1	VD	1

GALAXIES

Position α 1950 δ	NGC IC*	m_p	V_s km/sec	Remarks
h m o '				
16 09.5 + 56 23		15.6		
16 13.8 + 56 00		15.2		
16 13.8 + 56 31		15.6		double system



FIELD No. 299

16^h53^m $+60^\circ00'$

Survey Plate No. 1414

GC STARS

Nos.	R.A.	Decl.	m_p
	h m s	o ' "	
22281	16 31 42.9	+ 60 55 39	5.85
22644	16 47 07.0	+ 57 34 33	7.03
22876	16 55 51.1	+ 62 26 46	6.79
22953	16 59 01.6	+ 58 32 06	6.72
22998	17 00 38.4	+ 60 43 09	6.24
23243	17 11 05.6	+ 58 01 31	7.26

CLUSTERS OF GALAXIES

Cluster	Character	Population	Diameter in cm	Distance	Number on chart
1628.3 + 5840	medium compact	84	2.7	VD	3
1629.0 + 6045	medium compact	87	2.1	VD	2
1631.9 + 6021	compact	111	3.9	D	26
1638.4 + 6038	open	510	30.6	Near	15
1645.4 + 6100	medium compact	122	2.8	D	25
1646.6 + 6148	compact	55	0.7	ED	24
1647.0 + 5943	open	88	1.6	ED	4
1648.8 + 5715	open	98	1.7	VD	5
1650.8 + 5947	open	58	1.1	ED	9
1651.0 + 6200	compact	45	0.8	ED	17
1653.5 + 6124	open	111	4.1	D	16
1653.7 + 5858	medium compact	97	3.5	D	22
1654.0 + 6015	compact	93	2.1	VD	23
1657.0 + 5830	medium compact	120	4.6	MD	21
1657.4 + 6221	compact	45	1.0	ED	10
1657.9 + 6248	medium compact	123	4.0	D	6
1700.2 + 5941	medium compact	179	5.5	MD	19
1705.3 + 6025	compact	80	2.5	VD	18
1708.0 + 5825	medium compact	147	5.3	MD	20
1710.4 + 6401	compact	345	10.8	MD	7
1711.2 + 6147	open	57	1.3	ED	14
1711.6 + 6245	open	141	3.4	D	8
1712.1 + 6001	compact	59	1.4	ED	13
1714.2 + 5840	medium compact	61	1.6	VD	12
1715.0 + 5903	medium compact	103	5.6	D	11
1730.4 + 5829	open	417	26.0	Near	1

Average number of galaxies per cluster = 132.2

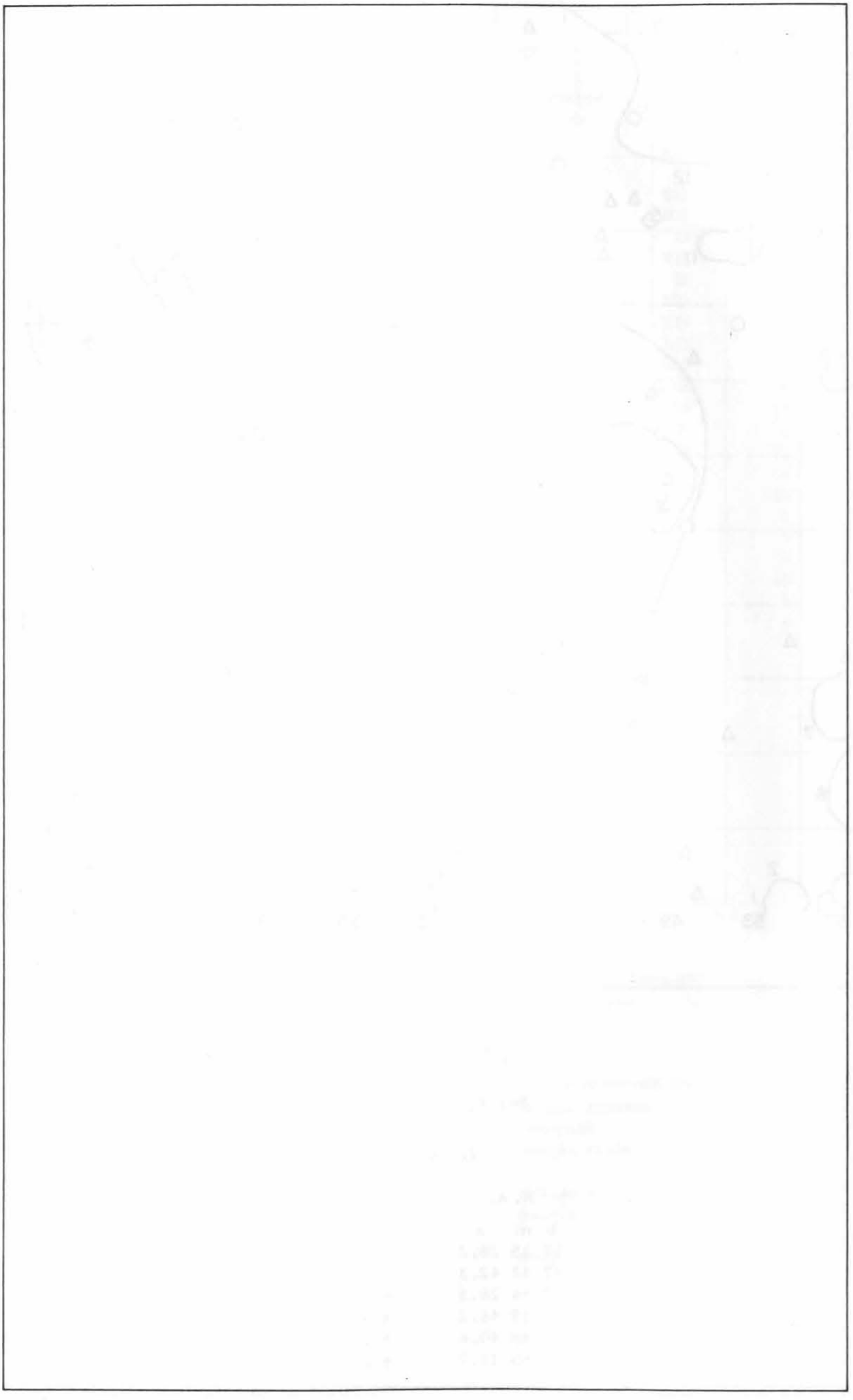
GALAXIES

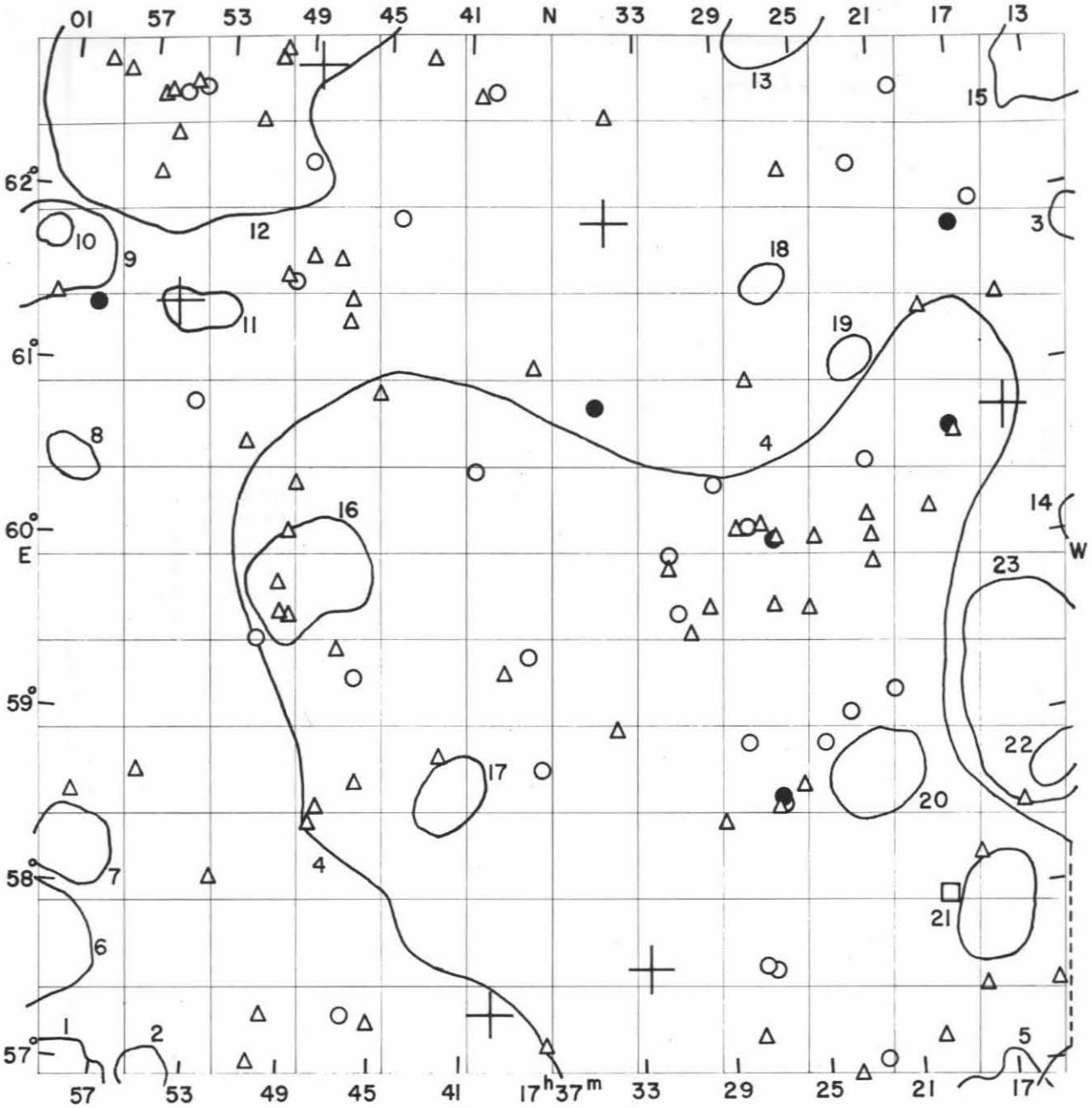
Position α 1950 h m	Position δ o '	NGC IC*	m_p	V_s km/sec	Remarks
16 27.2	+ 62 47		15.3		
16 30.6	+ 57 49	6187	15.1		
16 30.8	+ 59 45	6189	13.3		
16 31.2	+ 58 33	6190	13.2		
16 32.2	+ 62 46		15.5		extremely diffuse spiral
16 33.8	+ 62 05		15.7		
16 34.5	+ 57 37	6198	14.8		
16 38.0	+ 57 50		14.1		
16 39.3	+ 58 44	6206	14.5		
16 39.4	+ 62 05		15.7		
16 39.6	+ 58 13		14.9		diffuse spiral
16 40.3	+ 59 26		15.1		
16 40.3	+ 61 23		15.6		
16 40.5	+ 57 54	6211	13.8		
16 40.6	+ 61 25		13.7		
16 40.6	+ 62 29		14.7		
16 40.7	+ 57 56	6213	15.2		
16 40.9	+ 57 58		15.7		
16 41.1	+ 58 01		15.6		
16 41.5	+ 61 55		15.5		
16 42.5	+ 61 40	6223	13.1		
16 42.9	+ 62 04	6226	13.8		

Position α 1950 h m	Position δ o '	NGC IC*	m_p	V_s km/sec	Remarks
16 43.6	+ 62 10		15.0		
16 44.6	+ 61 55		15.7		
16 45.1	+ 59 44		14.7		
16 45.5	+ 62 40		15.7		
16 45.6	+ 62 19		14.9		compact
16 46.0	+ 59 12		15.4		
16 46.1	+ 58 32	1231*	13.7		
16 46.1	+ 62 54		15.2		
16 46.6	+ 62 14	6238	14.4		
16 47.5	+ 62 17	6244	14.3		
16 48.6	+ 59 00		15.5		
16 50.2	+ 59 49		14.1		
16 51.7	+ 60 37	6258	14.5		
16 55.7	+ 58 08		15.4		
16 57.6	+ 59 03	6285	14.6		
16 57.7	+ 59 12		15.0		
16 57.8	+ 57 12		14.6		
16 57.8	+ 59 02	6286	14.2		
16 57.8	+ 59 50		15.3		
17 00.1	+ 59 02	6291	14.8		
17 00.1	+ 59 04	6290	14.3		
17 00.3	+ 58 46		15.6		
17 00.5	+ 60 20		15.1		
17 01.8	+ 61 14		15.5		
17 02.4	+ 61 07	6292	14.4		
17 02.6	+ 61 32		14.9		double system
17 02.7	+ 59 48		15.4		
17 03.0	+ 62 06	6297	14.4		
17 04.6	+ 62 31	6299	15.0		
17 05.6	+ 60 46		15.7		
17 07.0	+ 60 47	6306	14.3		
17 07.1	+ 60 48	6307	14.0		
17 07.4	+ 61 03	6310	13.8		
17 08.3	+ 62 06		15.6		
17 10.1	+ 57 00		15.2		
17 11.0	+ 57 40		15.2		very compact
17 11.0	+ 60 03	1248*	14.6		
17 12.4	+ 57 45		15.7		
17 12.5	+ 59 23		14.3		disrupted double system
17 13.4	+ 58 52		15.3		
17 13.7	+ 57 22		15.7		compact
17 14.5	+ 57 23	6346	15.3		
17 14.5	+ 57 25	6345	15.4		
17 14.5	+ 57 29	6338	14.2		
17 14.5	+ 57 30		15.6		double nucleus
17 14.9	+ 57 26	1252*=4649*	15.7		
17 15.4	+ 61 25		15.3		
17 15.8	+ 58 29		15.7		
17 16.3	+ 61 58		14.8		
17 17.4	+ 61 50	6359	13.6	- 2948	

MAGNITUDES AND TYPES FROM OTHER SOURCES

NGC IC*	Bigay 1951		Pettit 1954		Humason, Mayall, Sandage 1956		Holmberg 1958	
6359	-	-	13.76	E1	13.8	E1	-	-





FIELD No. 300

17^h37^m $+60^\circ00'$

Survey Plate No. 1148

GC STARS

Nos.	R.A.	Decl.	m_p
	h m s	° ′ ″	
23358	17 15 28.2	+ 60 46 00	6.73
23838	17 32 42.3	+ 57 35 28	6.17
23874	17 34 28.3	+ 61 54 45	5.31
24010	17 39 46.2	+ 57 20 03	6.84
24249	17 48 40.6	+ 62 48 40	6.69
24424	17 55 11.7	+ 61 24 03	7.18

CLUSTERS OF GALAXIES

Cluster	Character	Population	Diameter in cm	Distance	Number on chart
1711.2 + 6147	open	57	1.3	ED	3
1711.6 + 6245	open	141	3.4	D	15
1712.1 + 6001	compact	59	1.4	ED	14
1714.2 + 5840	medium compact	61	1.6	VD	22
1715.0 + 5903	medium compact	103	5.6	D	23
1717.5 + 5752	open	96	2.9	VD	21
1717.9 + 5636	medium compact	130	3.5	D	5
1722.5 + 5840	medium compact	103	2.8	VD	20
1722.8 + 6104	compact	81	1.2	ED	19
1725.0 + 6310	medium compact	181	3.4	ED	13
1726.9 + 6132	compact	86	1.2	ED	18
1730.4 + 5829	open	417	26.0	Near	4
1741.6 + 5836	medium compact	93	2.3	VD	17
1748.4 + 5949	medium compact	93	3.7	D	16
1754.2 + 6120	medium compact	87	1.7	VD	11
1754.7 + 5654	compact	110	1.6	ED	2
1754.9 + 6230	medium compact	140	8.5	Near	12
1758.4 + 5649	compact	138	2.7	ED	1
1758.4 + 5813	open	100	2.4	ED	7
1759.9 + 6027	compact	100	1.3	ED	8
1801.6 + 6144	medium compact	55	1.0	ED	10
1801.7 + 6136	medium compact	290	3.7	VD	9
1803.0 + 5747	medium compact	193	6.7	MD	6

Average number of galaxies per cluster = 126.7

GALAXIES

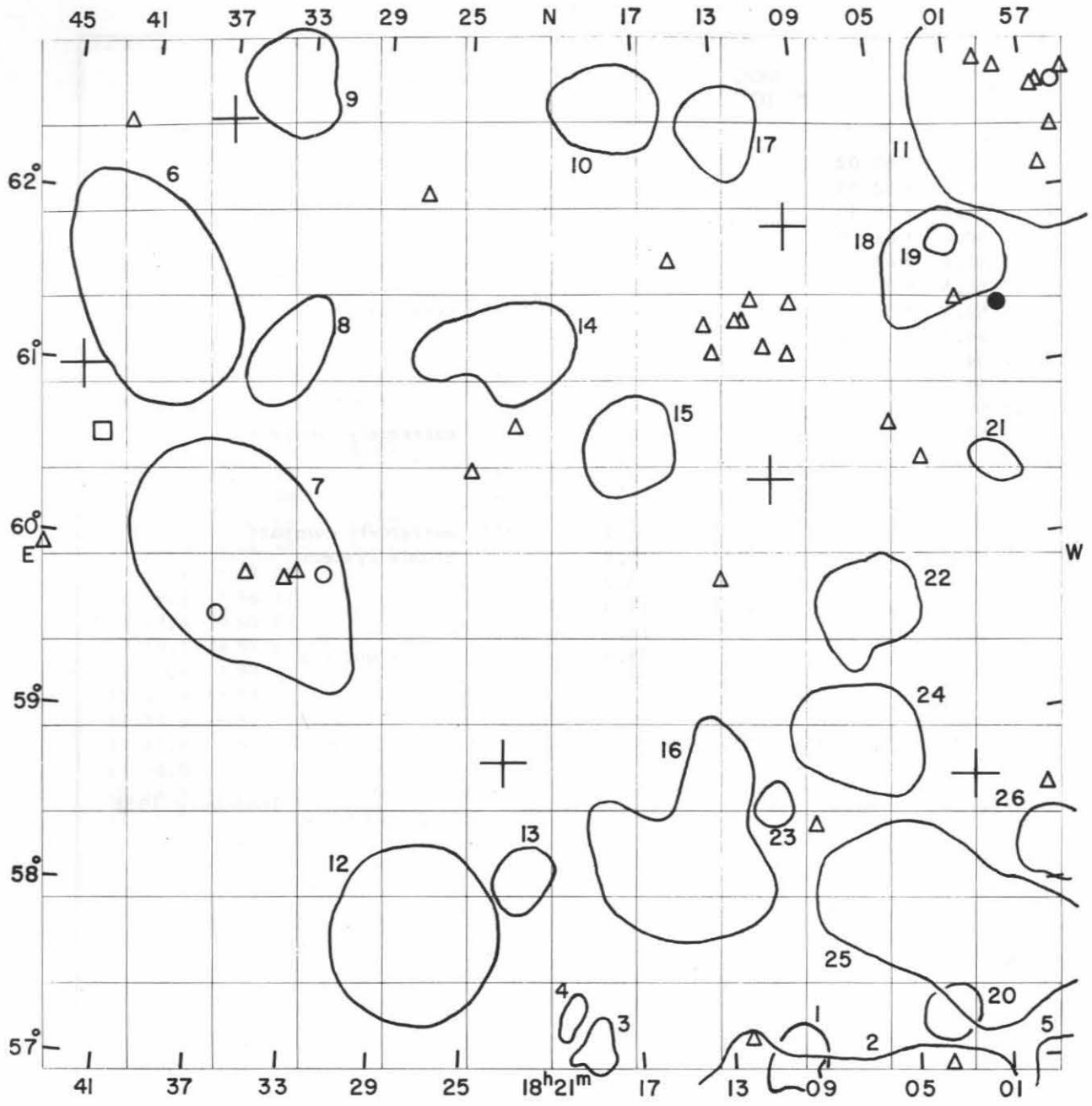
Position α 1950 h m	Position δ 1950 ° ′	NGC IC*	m_p	V_s km/sec	Remarks
17 14.9	+ 57 26	1252*=4649*	15.7		
17 15.4	+ 61 25		15.3		
17 15.8	+ 58 29		15.7		
17 16.3	+ 61 58		14.8		
17 17.4	+ 61 50	6359	13.6	+ 2948	
17 17.8	+ 58 12		15.1		
17 17.9	+ 60 38		15.5		extremely compact
17 18.0	+ 57 26		15.7		very compact
17 18.0	+ 60 40	6361	13.9		
17 19.2	+ 61 22		15.7		
17 19.3	+ 60 12		15.3		
17 19.4	+ 57 58		12.4		Draco resolved dwarf system
17 20.0	+ 57 09		15.7		double system
17 20.0	+ 62 38		14.7		compact
17 21.3	+ 59 10		14.9		double system, bridge
17 22.0	+ 59 55		15.6		
17 22.0	+ 60 04		15.6		diffuse spiral
17 22.2	+ 60 11		15.5		double system
17 22.2	+ 60 30		14.4		
17 22.3	+ 62 13	6365	14.6		double system
17 22.5	+ 57 02	6370	14.2		
17 23.5	+ 59 03	6373	14.5		
17 23.6	+ 56 56		15.5		
17 24.6	+ 58 52	6376+6377	14.1		double system, tidal effect
17 24.7	+ 60 04		15.5		extremely compact

Position α 1950 h m	δ ° ′	NGC IC*	m_p	V_s km/sec	Remarks
17 25.1	+ 59 40		15.6		
17 25.7	+ 58 39		15.7		
17 25.9	+ 62 11		15.5		
17 26.5	+ 58 33	1258*	14.4		extremely compact
17 26.6	+ 58 35	1259*	14.0		double system, halo
17 26.6	+ 60 04		15.6		
17 26.7	+ 58 32	1260*	15.7		
17 26.7	+ 59 42		15.2		double system
17 26.7	+ 60 03	6381	13.6		
17 27.2	+ 57 35	6385	14.2		
17 27.3	+ 60 09		15.5		extremely compact
17 27.6	+ 57 36	6387	15.0		compact, jet
17 27.8	+ 57 13		15.4		
17 27.8	+ 60 59		15.5		
17 27.9	+ 60 08	6390	14.5		
17 28.1	+ 58 54	6391	15.0		
17 28.4	+ 60 07		15.6		
17 29.2	+ 58 27		15.7		
17 29.4	+ 60 24		14.2		
17 29.7	+ 59 41	6393	15.4		
17 30.6	+ 59 32		15.6		
17 31.2	+ 59 40	6399	14.8		
17 31.6	+ 59 55		15.7		extremely compact
17 31.6	+ 59 59		15.0		
17 34.0	+ 58 59		15.6		compact
17 34.4	+ 62 30		15.6		double system
17 35.0	+ 60 50	6411	13.2		
17 37.2	+ 57 10		15.7		extremely compact
17 37.3	+ 58 45	6418	14.7		
17 37.8	+ 61 04		15.1		
17 38.0	+ 59 25	1267*	14.5		
17 39.1	+ 59 19		15.7		
17 39.7	+ 62 39	6435	14.9		compact
17 40.4	+ 62 37		15.2		
17 40.6	+ 60 29	6436	14.9		
17 42.1	+ 58 50		15.7		diffuse spiral
17 42.9	+ 62 50		15.7		
17 44.3	+ 61 55	6462	14.7		very compact
17 45.1	+ 57 18		15.3		very compact
17 45.2	+ 60 55	6464	15.3		
17 45.8	+ 58 40		15.5		
17 46.1	+ 59 16		14.4		
17 46.2	+ 57 20	6473=6474	15.0		
17 46.6	+ 61 27	4669*	15.1		
17 46.7	+ 61 19		15.3		
17 46.9	+ 59 26		15.6		
17 47.3	+ 61 41		15.7		double system
17 47.6	+ 58 31		15.2		compact
17 47.9	+ 58 26		15.4		
17 48.6	+ 61 41		15.2		very compact
17 48.9	+ 62 14	6488	14.6		compact
17 49.1	+ 59 38		15.7		diffuse
17 49.1	+ 60 23		15.4		
17 49.4	+ 60 06	6489	15.3		compact
17 49.5	+ 61 32	6491	14.5		
17 49.6	+ 59 39		15.1		compact
17 49.7	+ 57 19		15.5		
17 49.7	+ 59 49		15.6		
17 49.8	+ 61 34	6493	15.5		diffuse spiral

Position α 1950 h m	Position δ ° ′	NGC IC*	m_p	V_s km/sec	Remarks
17 50.2	+ 57 02		15.7		very compact
17 50.3	+ 62 53		15.5		
17 50.6	+ 59 30	6497	14.3		
17 50.6	+ 62 50		15.6		triple system
17 51.4	+ 62 28		15.7		compact
17 51.5	+ 60 37		15.6		
17 52.3	+ 58 05		15.7		very compact
17 54.0	+ 60 50	6510=6511	14.3		
17 54.4	+ 62 39	6512	14.8		
17 54.8	+ 62 40	6516	15.7		
17 55.4	+ 62 37	6521	14.3		
17 55.7	+ 58 42		15.4		extremely compact
17 55.7	+ 62 21		15.7		
17 56.1	+ 62 37		15.5		
17 56.4	+ 62 07		15.6		
17 56.5	+ 62 35		15.7		extremely compact
17 58.3	+ 62 43		15.7		double system
17 58.6	+ 58 33		15.2		
17 59.1	+ 61 21	6542	14.0		
17 59.3	+ 62 46		15.6		
18 01.1	+ 61 25		15.4		double nucleus

MAGNITUDES AND TYPES FROM OTHER SOURCES

NGC IC*	Bigay 1951		Pettit 1954		Humason, Mayall, Sandage 1956		Holmberg 1958	
6359	-	-	13.76	E1	13.8	E1	-	-



FIELD No. 301

18^h21^m $+60^o00'$

Survey Plate No. 512

GC STARS

Nos.	R.A.	Decl.	m_p
	h m s	o ' "	
24604	18 01 46.6	+ 58 37 27	6.67
24816	18 09 24.8	+ 61 52 08	7.08
24848	18 10 30.9	+ 60 23 47	6.32
25151	18 23 10.8	+ 58 46 16	4.85
25519	18 37 06.4	+ 62 28 50	5.60
25705	18 43 42.9	+ 60 59 41	6.23

CLUSTERS OF GALAXIES

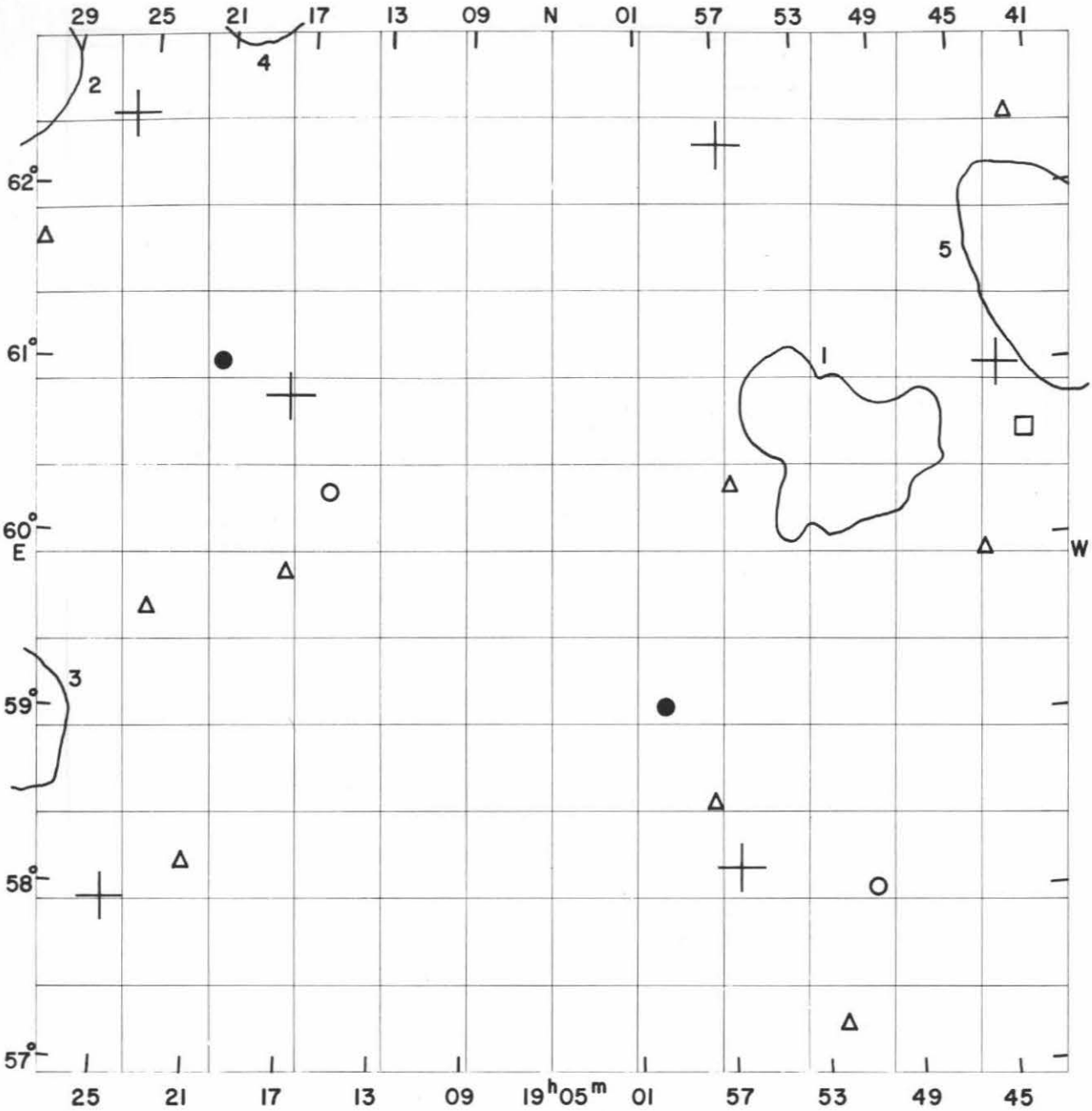
Cluster	Character	Population	Diameter in cm	Distance	Number on chart
1754.9 + 6230	medium compact	140	8.5	Near	11
1758.4 + 5649	compact	138	2.7	ED	5
1758.4 + 5813	open	100	2.4	ED	26
1759.9 + 6027	compact	100	1.3	ED	21
1801.6 + 6144	medium compact	55	1.0	ED	19
1801.7 + 6136	medium compact	290	3.7	VD	18
1803.0 + 5747	medium compact	193	6.7	MD	25
1803.4 + 5716	medium compact	76	1.8	VD	20
1806.3 + 5939	open	150	3.2	D	22
1806.9 + 5853	medium compact	93	3.8	VD	24
1807.2 + 5633	medium compact	130	8.6	Near	2
1810.3 + 5659	medium compact	64	2.0	VD	1
1810.9 + 5830	compact	62	1.3	ED	23
1812.6 + 6225	medium compact	68	2.7	VD	17
1814.8 + 5814	open	157	5.6	D	16
1817.4 + 6037	open	155	3.1	VD	15
1818.2 + 6233	open	61	3.1	VD	10
1818.9 + 5705	medium compact	90	1.4	VD	3
1819.9 + 5717	medium compact	54	1.0	ED	4
1822.3 + 5806	open	104	2.0	VD	13
1823.1 + 6110	open	119	3.7	D	14
1826.8 + 5745	open	107	5.5	D	12
1833.7 + 6106	compact	100	2.8	VD	8
1834.0 + 6241	medium compact	102	3.2	D	9
1835.4 + 5955	open	185	7.1	D	7
1840.5 + 6126	open	134	6.1	MD	6

Average number of galaxies per cluster = 116.4

GALAXIES

Position α 1950 h m	Position δ 1950 o '	NGC IC*	m_p	V_s km/sec	Remarks
17 54.8	+ 62 40	6516	15.7		
17 55.4	+ 62 37	6521	14.3		
17 55.7	+ 62 21		15.7		
17 56.1	+ 62 37		15.5		
17 56.4	+ 62 07		15.6		
17 56.5	+ 62 35		15.7		extremely compact
17 58.3	+ 62 43		15.7		double system
17 58.6	+ 58 33		15.2		
17 59.1	+ 61 21	6542	14.0		
17 59.3	+ 62 46		15.6		
18 01.1	+ 61 25		15.4		double nucleus
18 03.4	+ 60 28		15.4		
18 03.5	+ 56 57		15.6		
18 04.8	+ 60 42		15.6		
18 09.0	+ 58 22		15.6		extremely diffuse spiral
18 09.3	+ 61 25	6592	15.5		compact
18 09.6	+ 61 07	6594	15.4		
18 10.7	+ 61 10	6597	15.7		
18 11.3	+ 61 26	6601	15.6		
18 11.7	+ 61 19	6608	15.6		
18 12.0	+ 61 19	6609	15.3		

Position α 1950 h m	Position δ o '	NGC IC*	m_p	V_s km/sec	Remarks
18 12.2	+ 57 10		15.7		
18 13.0	+ 59 49		15.5		diffuse
18 13.2	+ 61 08	4708*	15.5		compact
18 13.5	+ 61 18	6617	15.6		diffuse
18 15.2	+ 61 40		15.5		
18 22.7	+ 60 43		15.4		
18 24.8	+ 60 28		15.7		
18 27.0	+ 62 05		15.3		
18 31.7	+ 59 50		15.0		
18 32.9	+ 59 51	6670	15.3		interacting triple system
18 33.5	+ 59 49		15.2		
18 35.3	+ 59 50		15.7		
18 36.6	+ 59 35	6687	14.9		very diffuse spiral
18 42.4	+ 62 25		15.5		
18 42.6	+ 60 37	6701	12.9		
18 44.9	+ 59 56		15.4		



FIELD No. 302

19^h05^m $+60^o00'$

Survey Plate No. 830

GC STARS

Nos.	R.A.	Decl.	m_p
	h m s	o ' "	
25705	18 43 42.9	+ 60 59 41	6.23
26069	18 56 39.0	+ 58 09 21	6.31
26074	18 56 47.2	+ 62 19 43	6.44
26659	19 17 31.3	+ 60 52 02	7.01
26864	19 24 52.4	+ 57 55 33	6.46
26888	19 25 51.8	+ 62 27 16	6.46

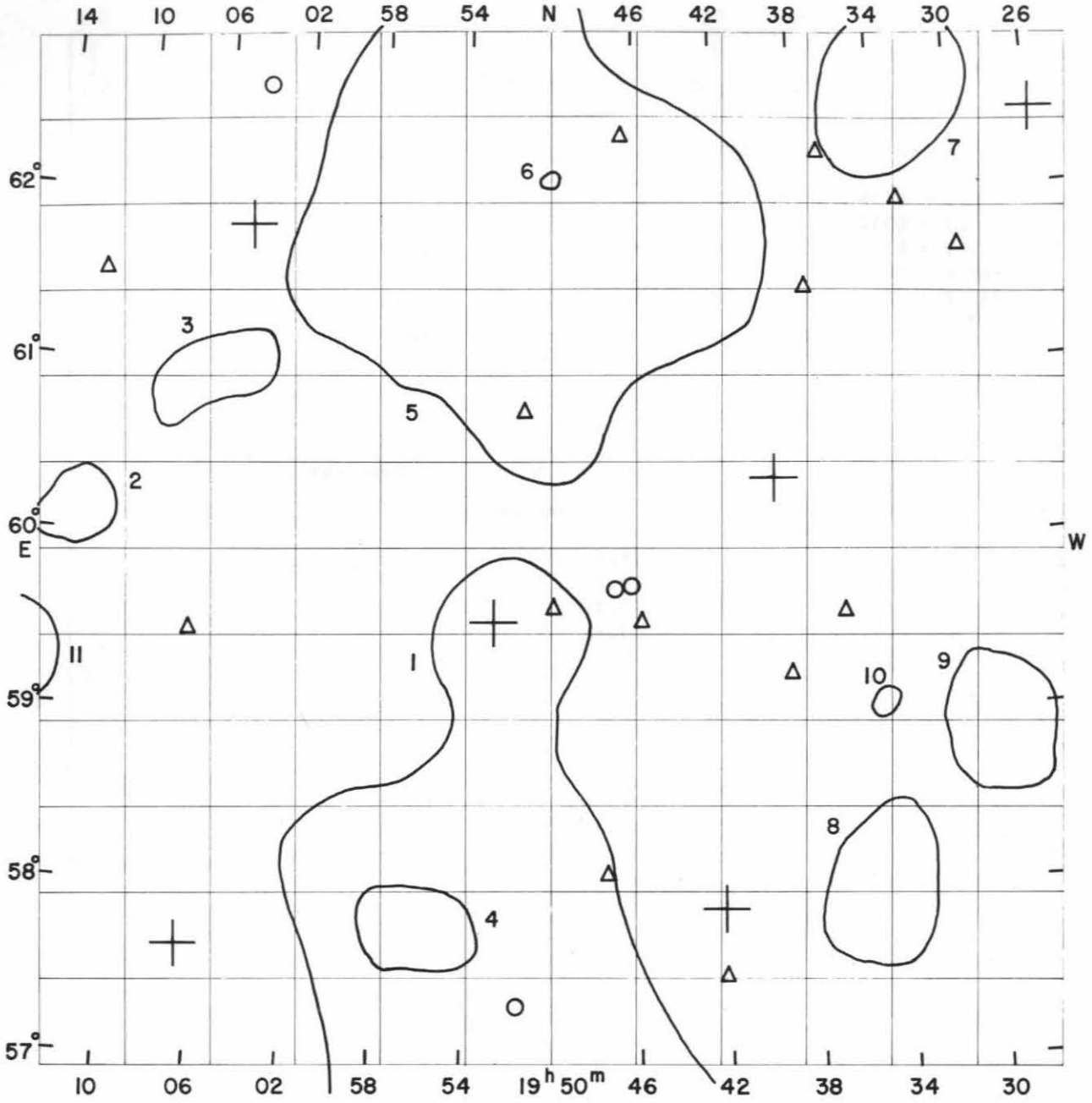
CLUSTERS OF GALAXIES

Cluster	Character	Population	Diameter in cm	Distance	Number on chart
1840.5 + 6126	open	134	6.1	MD	5
1851.3 + 6032	medium compact	175	5.3	MD	1
1917.7 + 6340	medium compact	195	7.0	MD	4
1929.6 + 5852	open	122	3.9	D	3
1933.2 + 6236	medium compact	100	4.9	D	2

Average number of galaxies per cluster = 145.2

GALAXIES

Position α 1950 h m	Position δ 1950 ° ′	NGC IC*	m_p	V_s km/sec	Remarks
18 42.4	+ 62 25		15.5		
18 42.6	+ 60 37	6701	12.9		
18 44.9	+ 59 56		15.4		
18 50.7	+ 58 02		14.8		
18 52.3	+ 57 15		15.1		
18 56.7	+ 60 22		15.7		
18 57.7	+ 58 33		15.6		compact
18 59.9	+ 59 06	6750	13.7		
19 15.5	+ 60 19	6787	14.9		
19 17.4	+ 59 51		15.7		
19 20.8	+ 61 03	6797	13.5		
19 21.5	+ 58 10		15.2		
19 23.7	+ 59 36		15.3		double system
19 30.0	+ 61 41		15.6		



FIELD No. 303

$19^h50^m \quad +60^\circ00'$

Survey Plate No. 545

GC STARS

Nos.	R.A.	Decl.	m_p
	h m s	o ' "	
26888	19 25 51.8	+ 62 27 16	6.46
27252	19 39 26.1	+ 60 23 23	6.21
27322	19 42 16.1	+ 57 53 48	6.31
27581	19 52 41.8	+ 59 34 33	6.03
27911	20 04 45.2	+ 61 51 00	5.57
27962	20 06 41.6	+ 57 39 12	7.04

CLUSTERS OF GALAXIES

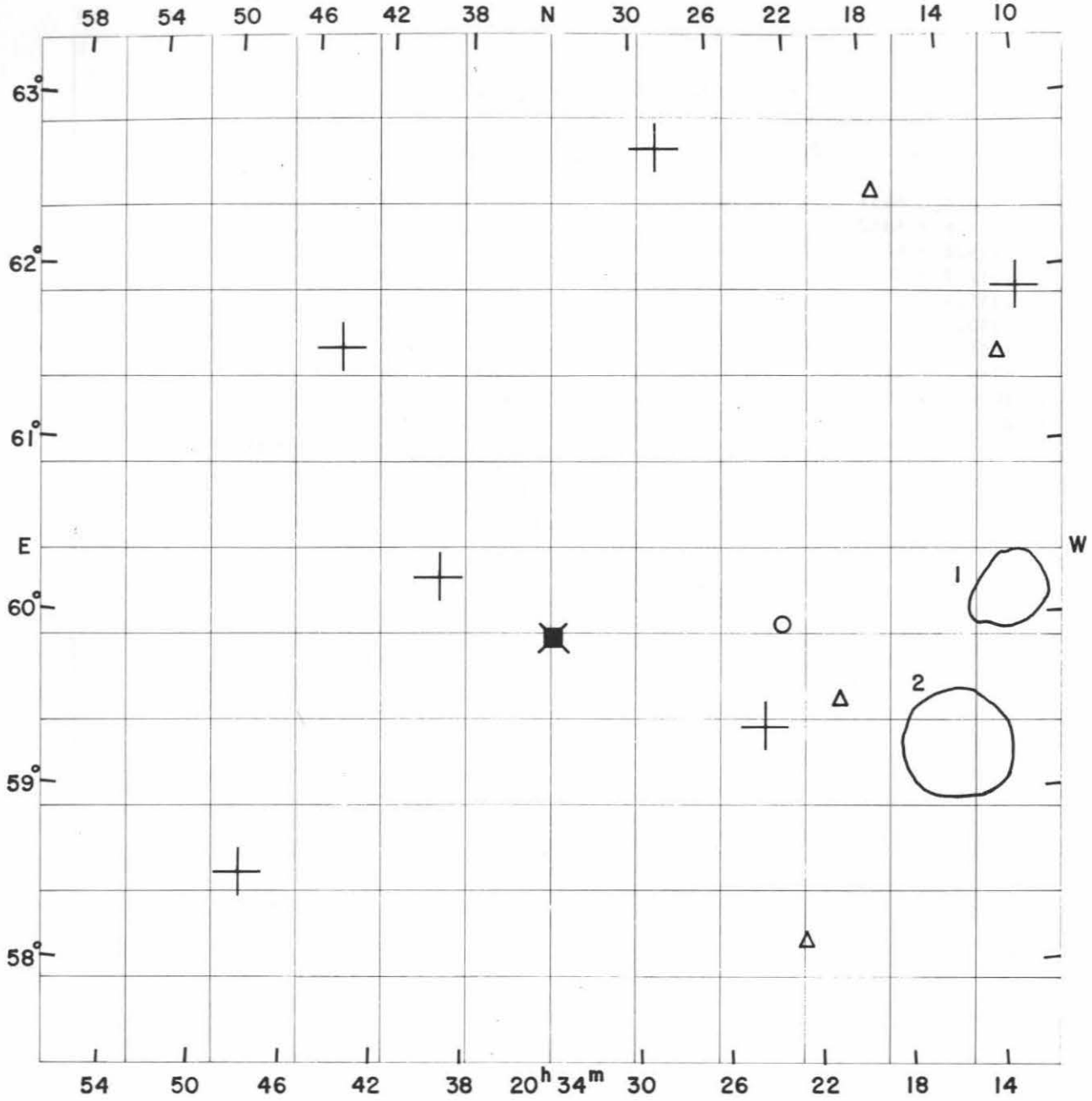
Cluster	Character	Population	Diameter in cm	Distance	Number on chart
1916.8 + 4855	medium compact	3755	73.7	Near	1*
1929.6 + 5852	open	122	3.9	D	9
1933.2 + 6236	medium compact	100	4.9	D	7
1934.7 + 5902	medium compact	65	0.9	ED	10
1935.4 + 5755	open	91	4.3	D	8
1950.1 + 6207	medium compact	27	0.5	VD	6
1951.5 + 6148	open	343	14.0	MD	5
1956.0 + 5746	medium compact	121	3.4	D	4
2006.3 + 6056	open	109	3.2	D	3
2012.4 + 6008	medium compact	80	2.3	VD	2
2015.2 + 5915	open	97	3.5	MD	11

*) See special map on page 386 of Volume III.

Average number of galaxies per cluster = 446.4

GALAXIES

Position α 1950 h m	Position δ o '	NGC IC*	m_p	V_s km/sec	Remarks
19 30.0	+ 61 41		15.6		
19 32.8	+ 61 58		15.5		
19 36.4	+ 59 37		15.7		
19 36.8	+ 62 16	6817	15.6		double system, connected
19 37.6	+ 61 29		15.5		double system, connected
19 38.9	+ 59 15		15.6		
19 42.3	+ 57 30		15.7		
19 45.8	+ 59 35		15.4		
19 46.3	+ 59 47	6829	15.0		
19 46.5	+ 62 24		15.3		
19 47.1	+ 59 46	6831	14.7		
19 47.5	+ 58 06		15.3		
19 49.9	+ 59 40		15.7		
19 51.3	+ 60 48		15.6		
19 51.6	+ 57 20		14.2		
20 04.2	+ 62 38		14.8		
20 06.9	+ 59 29		15.7		
20 11.8	+ 61 32		15.4		



FIELD No. 304

20^h34^m $+60^o30'$

Survey Plate No. 593

GC STARS

Nos.	R.A.	Decl.	m_p
	h m s	o ' "	
28071	20 10 45.9	+ 61 55 36	5.72
28434	20 24 02.9	+ 59 26 10	6.48
28541	20 28 44.7	+ 62 49 32	4.28
28832	20 39 14.2	+ 60 19 26	5.95
28962	20 44 16.5	+ 61 38 39	3.59
29063	20 48 06.6	+ 58 33 42	6.71

CLUSTERS OF GALAXIES

Cluster	Character	Population	Diameter in cm	Distance	Number on chart
2012.4 + 6008	medium compact	80	2.3	VD	1
2015.2 + 5915	open	97	3.5	MD	2

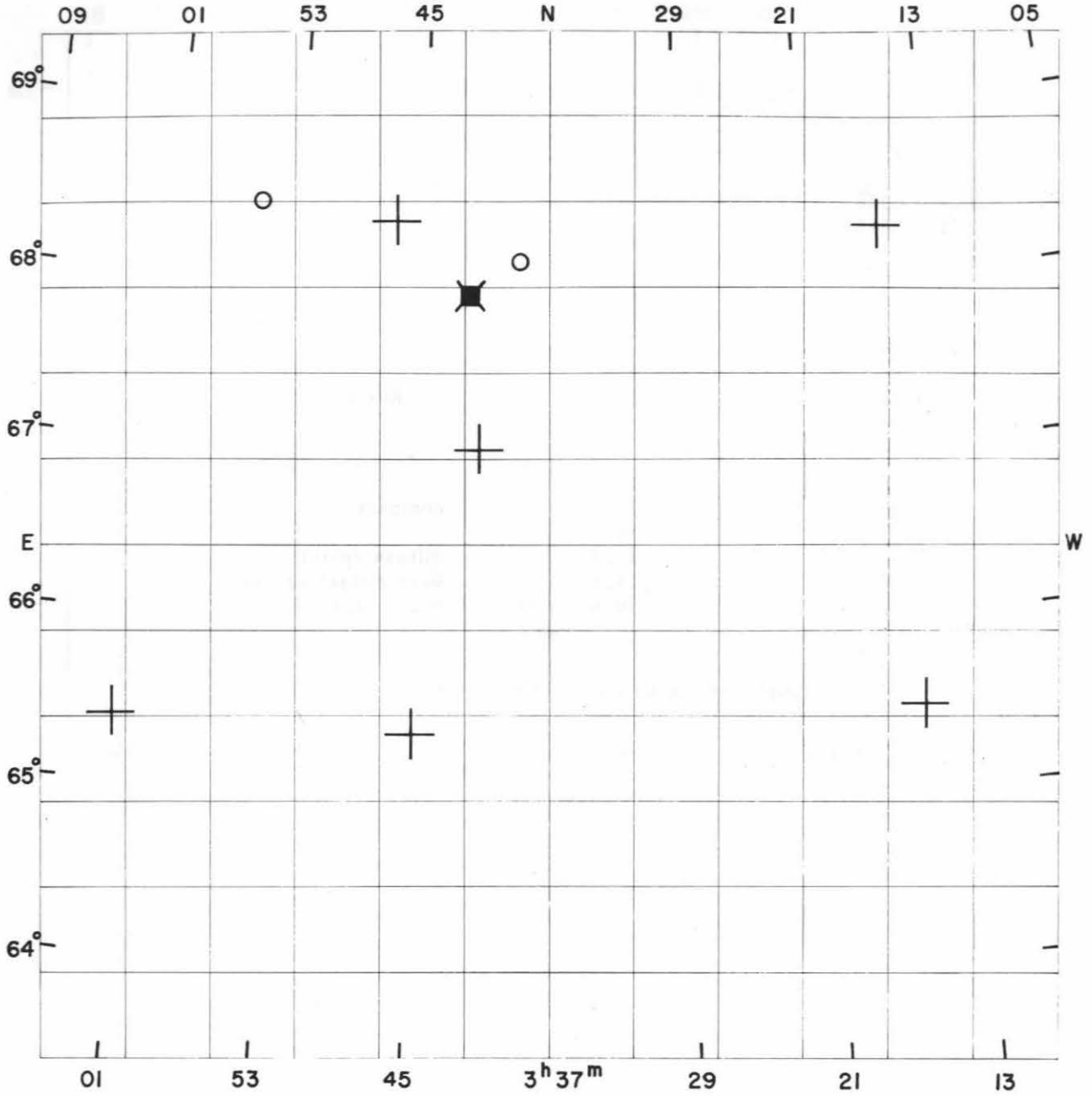
Average number of galaxies per cluster = 88.5

GALAXIES

Position α 1950 h m	Position δ o '	NGC IC*	m_p	V_s km/sec	Remarks
20 11.8	+ 61 32		15.4		
20 17.7	+ 62 31		15.2		compact
20 20.5	+ 59 35		15.7		
20 22.4	+ 58 12	6916	15.3		diffuse spiral
20 23.0	+ 60 02		14.5		very diffuse spiral
20 33.8	+ 59 59	6946	10.5	- 16	m_H = 11.1 S

MAGNITUDES AND TYPES FROM OTHER SOURCES

NGC IC*	Bigay 1951		Pettit 1954		Humason, Mayall, Sandage 1956		Holmberg 1958	
6946	10.6	Sc	10.34	Sc	9.8	Sc	9.67	Sc-



FIELD No. 305

3^h37^m $+66^\circ30'$

Survey Plate No. 973

GC STARS

Nos.	R.A.	Decl.	m_p
	h m s	o ' "	
3947	3 15 33.8	+ 65 28 18	4.76
3956	3 16 11.6	+ 68 16 37	7.58
4463	3 41 15.5	+ 67 02 50	5.84
4553	3 44 55.2	+ 65 22 26	4.71
4604	3 46 45.7	+ 68 21 27	6.33
4903	4 01 57.0	+ 65 23 12	6.07

CLUSTERS OF GALAXIES

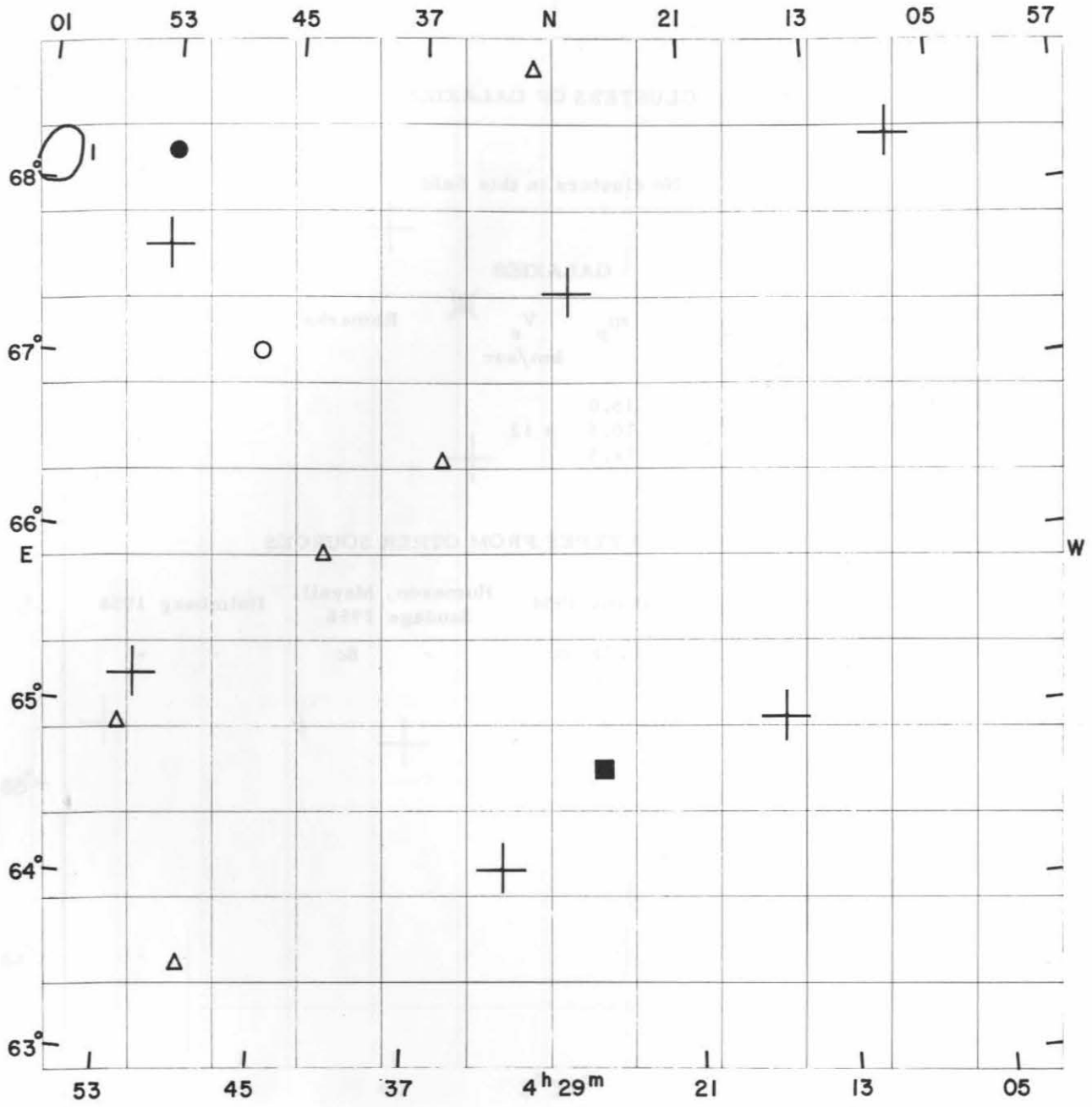
No clusters in this field

GALAXIES

Position α 1950 h m	Position δ o '	NGC IC*	m_p	V_s km/sec	Remarks
3 39.0	+68 08		15.0		
3 42.0	+67 57	342*	10.5	+12	
3 55.5	+68 26	1469	14.5		

MAGNITUDES AND TYPES FROM OTHER SOURCES

NGC IC*	Bigay 1951		Pettit 1954		Humason, Mayall, Sandage 1956		Holmberg 1958	
342*	-	-	10.73	Sc	-	Sc	-	-



FIELD No. 306

4^h29^m $+66^\circ00'$

Survey Plate No. 1303

GC STARS

Nos.	R.A.	Decl.	m_p
	h m s	° ' "	
5022	4 07 48.2	+ 68 22 23	6.41
5199	4 15 56.9	+ 65 01 16	5.40
5492	4 28 03.6	+ 67 31 34	6.86
5574	4 31 42.0	+ 64 09 35	5.91
5999	4 52 37.0	+ 67 41 56	7.14
6001	4 52 38.7	+ 65 12 04	6.78

CLUSTERS OF GALAXIES

Cluster	Character	Population	Diameter in cm	Distance	Number on chart
0500.4 + 6809	medium compact	65	1.5	ED	1

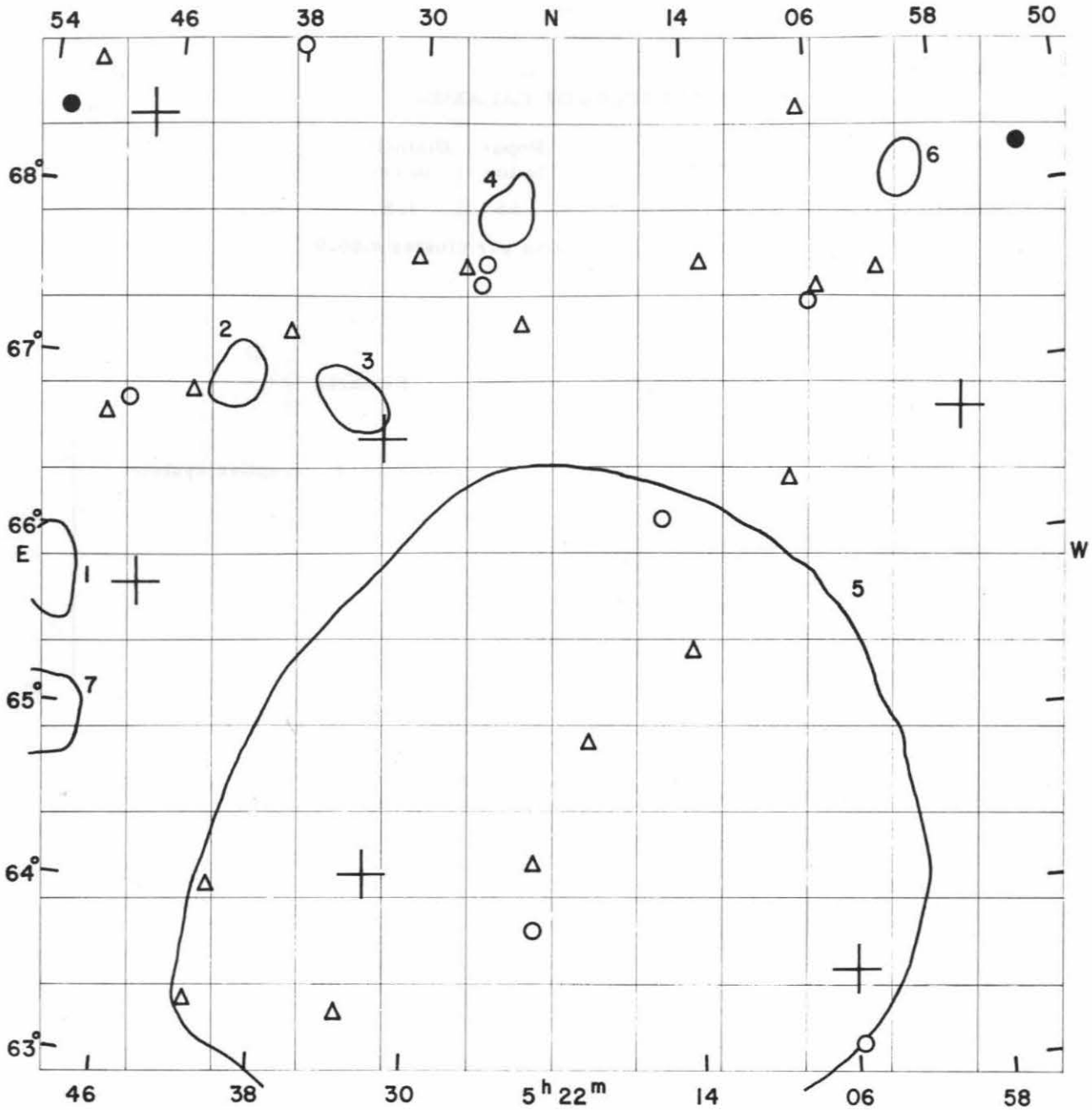
Average number of galaxies per cluster = 65.0

GALAXIES

Position α 1950 h m	Position δ 1950 o '	NGC IC*	m_p	V_s km/sec	Remarks	
4 26.1	+ 64 45	1569	11.8	- 46	m_H = 12.4	eruptive system
4 30.2	+ 68 48		15.6			
4 35.5	+ 66 32		15.5			
4 42.3	+ 65 57		15.1			
4 46.5	+ 67 07		14.8			
4 49.0	+ 63 31		15.7			
4 52.8	+ 68 14	396*	13.2			
4 53.1	+ 64 55		15.7			

MAGNITUDES AND TYPES FROM OTHER SOURCES

NGC IC*	Bigay 1951		Pettit 1954		Humason, Mayall, Sandage 1956		Holmberg 1958	
1569	-	-	11.90	Irr.	11.7	Irr.	11.75	Ir. I



FIELD No. 307

5^h22^m $+66^\circ00'$

Survey Plate No. 1246

GC STARS

Nos.	R.A.	Decl.	m_p
	h m s	o ' "	
6107	4 57 45.6	+ 66 45 21	6.29
6284	5 05 57.8	+ 63 32 09	6.66
6909	5 32 08.6	+ 66 39 57	6.24
6917	5 32 24.4	+ 64 07 30	6.03
7284	5 45 59.3	+ 65 44 22	6.65
7319	5 47 32.7	+ 68 27 37	6.40

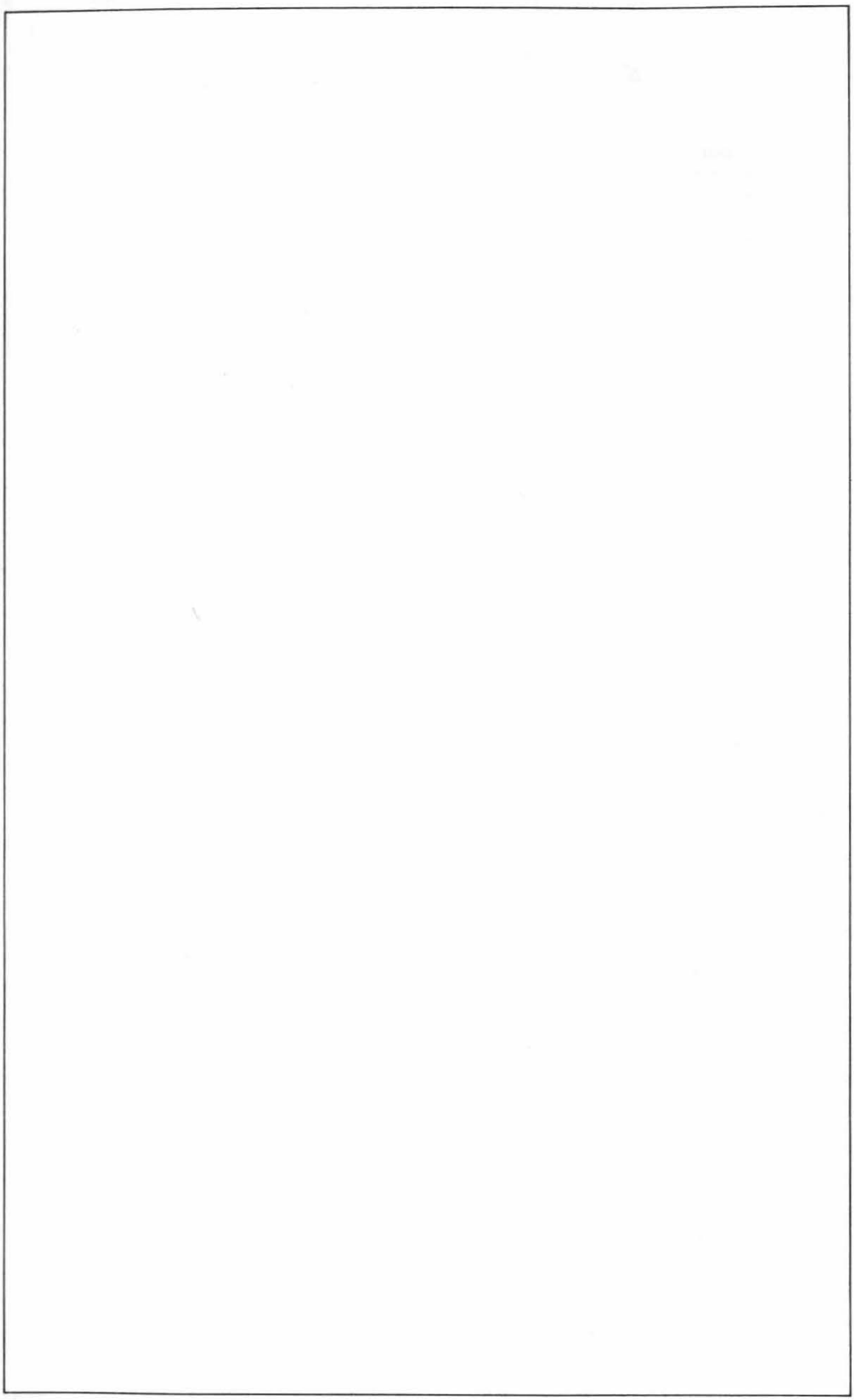
CLUSTERS OF GALAXIES

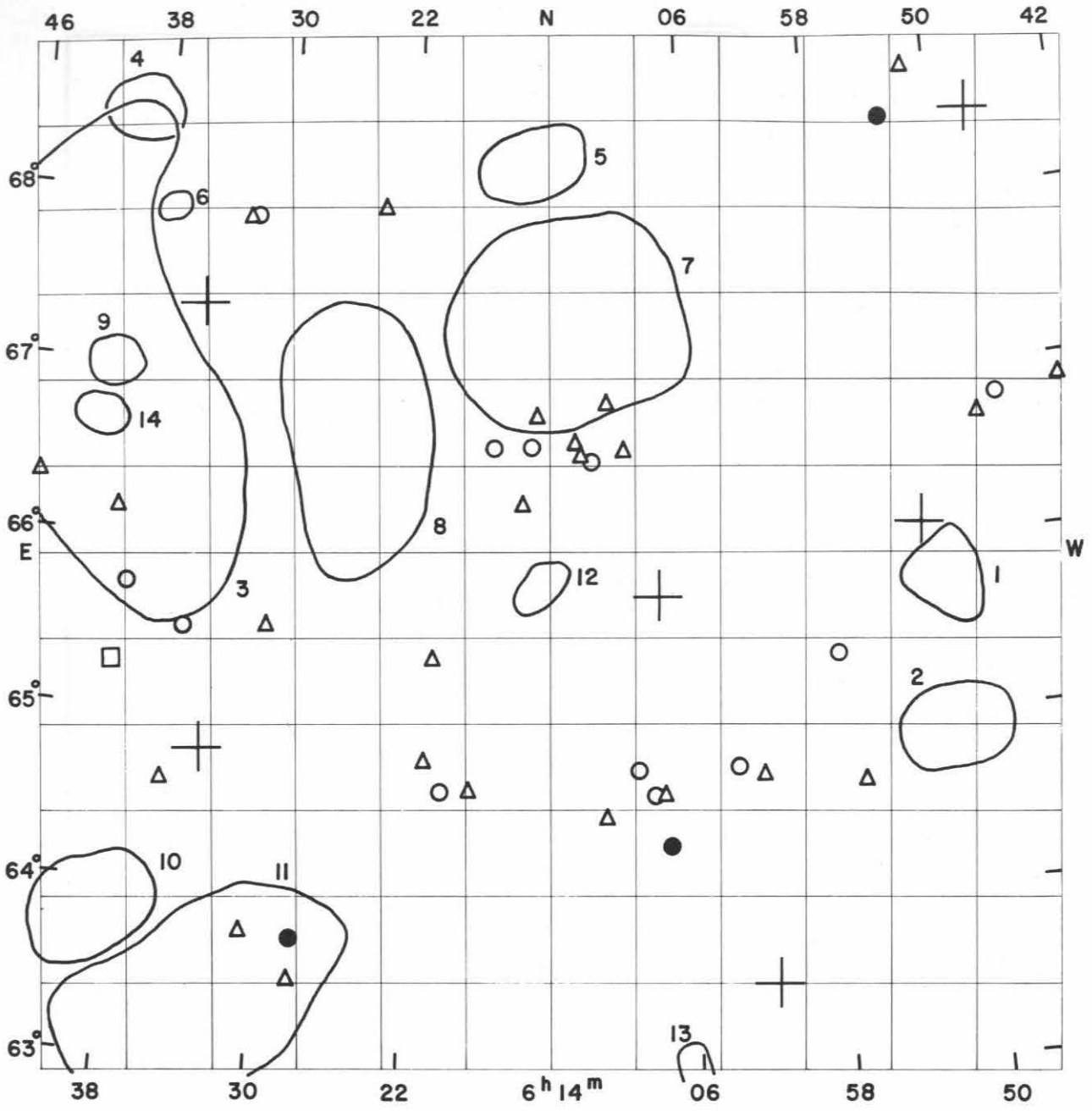
Cluster	Character	Population	Diameter in cm	Distance	Number on chart
0500.4 + 6809	medium compact	65	1.5	ED	6
0521.2 + 6418	open	347	22.8	Near	5
0525.0 + 6756	compact	68	1.8	ED	4
0534.0 + 6653	medium compact	70	2.1	ED	3
0540.8 + 6657	medium compact	74	1.8	ED	2
0551.4 + 6546	medium compact	65	2.6	VD	1
0551.5 + 6454	open	90	3.3	VD	7

Average number of galaxies per cluster = 111.3

GALAXIES

Position α 1950 h m	Position δ 1950 o '	NGC IC*	m_p	V_s km/sec	Remarks
4 52.8	+ 68 14	396*	13.2		
5 02.3	+ 67 35		15.7		
5 05.8	+ 63 07		14.5		
5 06.0	+ 67 30		15.7		
5 06.6	+ 67 25		14.1		
5 06.8	+ 68 31		15.5		
5 08.2	+ 66 25		15.4		
5 13.2	+ 67 40		15.1		
5 14.2	+ 65 25		15.4		diffuse spiral
5 15.8	+ 66 11		14.7		
5 20.0	+ 64 55		15.6		
5 23.1	+ 63 50		14.8		
5 23.1	+ 64 12		15.4		
5 24.0	+ 67 19		15.3		
5 26.1	+ 67 41		14.6		
5 26.5	+ 67 34		14.9		
5 27.4	+ 67 40		15.5		
5 30.2	+ 67 43		15.7		
5 33.6	+ 63 19		15.6		double nebula
5 38.0	+ 67 15		15.6		
5 38.1	+ 68 55		14.9		
5 40.7	+ 64 00		15.3		
5 41.5	+ 63 20		15.7		
5 43.7	+ 66 51		15.5		
5 47.4	+ 66 47		15.0		
5 48.6	+ 66 41		15.6		
5 51.3	+ 68 43		15.2		
5 53.0	+ 68 26		13.8		





FIELD No. 308

6^h14^m $+66^\circ00'$

Survey Plate No. 677

GC STARS

Nos.	R.A.	Decl.	m_p
	h m s	° ′ ″	
7319	5 47 32.7	+ 68 27 37	6.40
7452	5 52 30.2	+ 66 05 25	6.59
7693	6 01 52.0	+ 63 27 32	6.49
7856	6 07 49.3	+ 65 43 53	5.39
8593	6 33 25.3	+ 64 46 41	7.45
8640	6 34 58.5	+ 67 22 09	7.9

CLUSTERS OF GALAXIES

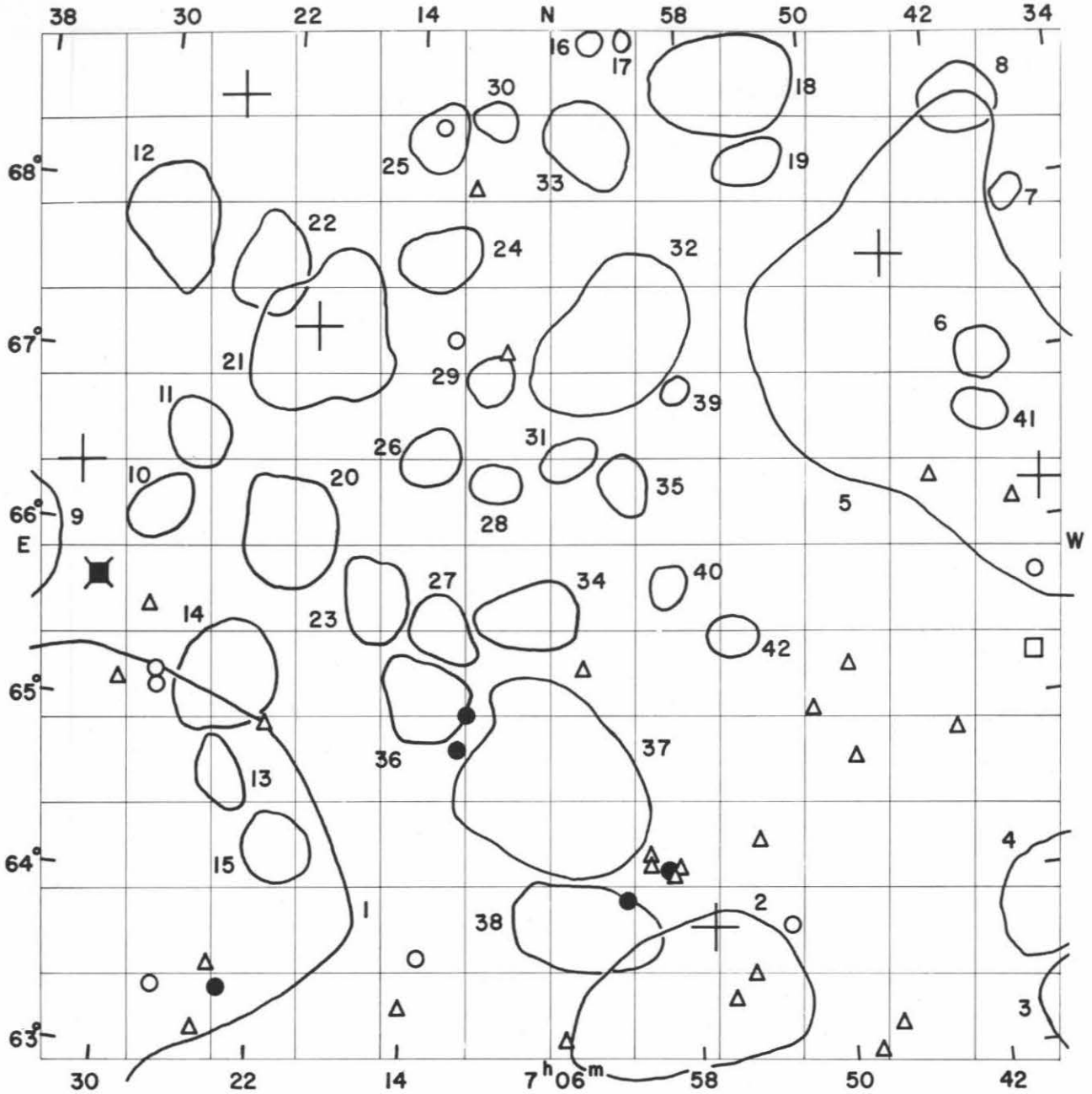
Cluster	Character	Population	Diameter in cm	Distance	Number on chart
0551.4 + 6546	medium compact	65	2.6	VD	1
0551.5 + 6454	open	90	3.3	VD	2
0606.3 + 6258	open	56	1.4	ED	13
0613.1 + 6720	compact	178	7.2	D	7
0614.4 + 6548	open	62	1.5	ED	12
0615.2 + 6815	medium compact	97	2.8	VD	5
0625.7 + 6640	open	129	6.4	MD	8
0632.7 + 6323	medium compact	144	7.3	Near	11
0637.6 + 6755	compact	58	1.0	ED	6
0638.9 + 6348	medium compact	102	3.8	D	10
0640.0 + 6828	medium compact	79	2.2	ED	4
0640.1 + 6700	medium compact	76	1.6	ED	9
0640.6 + 6640	medium compact	76	1.5	ED	14
0642.2 + 6653	open	190	11.7	MD	3

Average number of galaxies per cluster = 100.1

GALAXIES

Position α 1950 h m	Position δ 1950 ° ′	NGC IC*	m_p	V_s km/sec	Remarks
5 43.7	+ 66 51		15.5		
5 47.4	+ 66 47		15.0		
5 48.6	+ 66 41		15.6		
5 51.3	+ 68 43		15.2		
5 53.0	+ 68 26		13.8		
5 56.6	+ 64 38		15.6		compact, halo
5 57.5	+ 65 23		14.4		
6 02.2	+ 64 41		15.3		
6 03.6	+ 64 44		14.7		
6 07.4	+ 64 18		13.9		
6 07.8	+ 64 35		15.7		double nucleus
6 08.2	+ 64 35		14.9		
6 09.1	+ 64 43		14.8		
6 09.8	+ 66 35		15.3		
6 10.6	+ 66 51		15.3		
6 10.9	+ 64 27		15.1		
6 11.7	+ 66 31		14.9		
6 12.3	+ 66 33		15.5		
6 12.6	+ 66 37		15.4		double system
6 14.8	+ 66 46		15.6		
6 15.1	+ 66 36		14.9		
6 15.7	+ 66 16		15.7		
6 17.4	+ 66 36		14.5		
6 18.4	+ 64 37		15.5		
6 20.1	+ 64 36		14.6		
6 20.6	+ 65 22		15.2		
6 21.0	+ 64 46		15.1		
6 24.2	+ 67 58		15.6		
6 28.0	+ 63 28		15.6		
6 28.0	+ 63 43		13.3		
6 30.1	+ 65 31		15.7		
6 30.6	+ 63 45		15.7		
6 32.0	+ 67 54	445*	14.3		
6 32.4	+ 67 53		15.7		

Position α 1950 h m	Position δ 1950 o '	NGC IC*	m_p	V_s km/sec	Remarks
6 34.8	+65 30		14.8		
6 35.6	+64 36		15.7		
6 38.2	+65 43	2253	15.0		
6 38.7	+65 15		13.0		
6 39.2	+66 08		15.1		
6 43.9	+66 18		15.4		



FIELD No. 309

7^h06^m $+66^\circ00'$

Survey Plate No. 686

GC STARS

Nos.	R.A.	Decl.	m_p
	h m s	° ′ ″	
8705	6 37 26.4	+ 66 14 47	7.12
8902	6 45 44.9	+ 67 37 49	5.04
9198	6 57 12.6	+ 63 44 55	6.71
9837	7 20 08.3	+ 67 14 44	7.6
9985	7 25 41.7	+ 68 34 15	5.80
10186	7 33 36.2	+ 66 20 55	7.07

CLUSTERS OF GALAXIES

Cluster	Character	Population	Diameter in cm	Distance	Number on chart
0632.7 + 6323	medium compact	144	7.3	Near	3
0637.6 + 6755	compact	58	1.0	ED	7
0638.9 + 6348	medium compact	102	3.8	D	4
0640.0 + 6828	medium compact	79	2.2	ED	8
0640.1 + 6700	medium compact	76	1.6	ED	6
0640.6 + 6640	medium compact	76	1.5	ED	41
0642.2 + 6653	open	190	11.7	MD	5
0653.6 + 6812	compact	149	1.9	ED	19
0655.0 + 6840	open	67	3.8	D	18
0655.8 + 6527	compact	64	1.4	ED	42
0658.3 + 6320	compact	189	6.1	MD	2
0658.6 + 6651	medium compact	50	0.9	ED	39
0659.4 + 6545	compact	59	1.2	ED	40
0701.4 + 6857	compact	66	0.5	ED	17
0701.8 + 6620	open	79	1.7	ED	35
0702.2 + 6712	medium compact	129	4.7	MD	32
0703.6 + 6856	compact	50	0.8	ED	16
0703.9 + 6820	medium compact	93	2.6	VD	33
0704.2 + 6345	open	114	3.6	VD	38
0705.0 + 6630	medium compact	74	1.5	ED	31
0705.8 + 6434	open	168	5.8	D	37
0707.1 + 6535	open	100	2.6	VD	34
0709.3 + 6621	medium compact	65	1.4	ED	28
0709.5 + 6828	medium compact	70	1.2	ED	30
0709.7 + 6657	open	68	1.5	ED	29
0712.3 + 6530	open	105	2.1	VD	27
0712.7 + 6740	open	76	2.2	VD	24
0713.0 + 6504	medium compact	115	2.7	D	36
0713.1 + 6630	medium compact	87	1.8	VD	26
0713.2 + 6821	compact	73	1.9	ED	25
0716.0 + 6540	medium compact	108	2.3	ED	23
0719.9 + 6709	medium compact	124	4.7	D	21
0721.1 + 6411	medium compact	92	2.2	ED	15
0721.2 + 6602	medium compact	147	3.4	VD	20
0723.2 + 6733	compact	181	2.7	VD	22
0724.1 + 6436	compact	166	1.9	ED	13
0724.3 + 6510	open	86	3.3	VD	14
0726.9 + 6634	medium compact	98	2.0	ED	11
0728.7 + 6607	open	96	1.9	ED	10
0729.5 + 6750	medium compact	150	3.2	VD	12
0733.4 + 6102	medium compact	1315	36.3	Near	1
0741.0 + 6552	medium compact	148	6.6	D	9

Average number of galaxies per cluster = 132.0

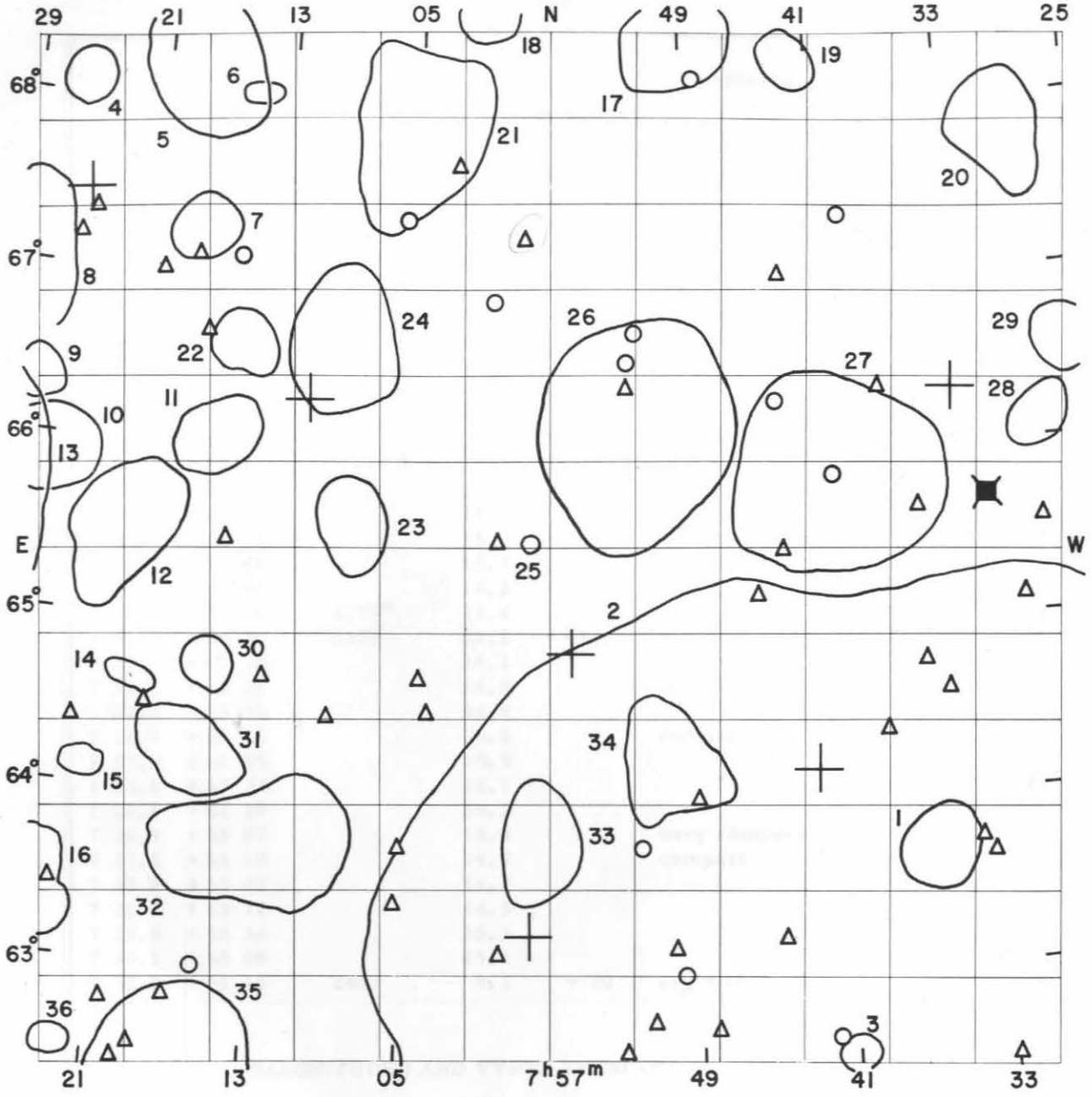
GALAXIES

Position α 1950 h m	Position δ o '	NGC IC*	m_p	V_s km/sec	Remarks
6 38.2	+ 65 43	2253	15.0		
6 38.7	+ 65 15		13.0		
6 39.2	+ 66 08		15.1		
6 43.6	+ 64 51		15.7		compact
6 43.9	+ 66 18		15.4		
6 47.6	+ 63 09		15.6		

Position α 1950 h m	Position δ o '	NGC IC*	m_p	V_s km/sec	Remarks
6 48.7	+ 62 59		15.6		
6 49.2	+ 64 43		15.7		
6 49.3	+ 65 16		15.3		
6 51.4	+ 65 01		15.5		
6 53.1	+ 63 45		15.0		
6 54.6	+ 64 16		15.3		
6 55.2	+ 63 28		15.5		extremely compact
6 56.3	+ 63 20		15.7		
6 59.0	+ 64 07		15.6		
6 59.4	+ 64 04		15.7		
6 59.6	+ 64 06		13.5		
7 00.6	+ 64 08		15.4		compact
7 00.7	+ 64 11		15.3		
7 01.8	+ 63 57		13.6		
7 04.2	+ 65 17		15.6		
7 05.1	+ 63 08		15.7		extremely faint jets
7 08.7	+ 67 08		15.6		double nebula
7 10.6	+ 68 04		15.2		
7 10.7	+ 65 02	2179*	13.4		
7 11.3	+ 64 49	2347	13.2	+ 4521	m_H = 12.7
7 11.8	+ 67 12		14.1		
7 12.8	+ 68 26		14.8		compact
7 13.2	+ 63 36		14.8		
7 14.0	+ 63 18		15.5		compact
7 22.0	+ 64 55		15.5		
7 23.6	+ 63 22		13.9		
7 24.3	+ 63 30		15.2		
7 24.9	+ 63 07		15.4		very compact
7 27.2	+ 63 22		14.9		compact
7 28.3	+ 65 07		14.7		
7 28.4	+ 65 12		14.5		
7 29.0	+ 65 34		15.3		
7 30.3	+ 65 08		15.1		
7 32.0	+ 65 43	2403	9.3	+ 70	m_H = 10.2 Sc

MAGNITUDES AND TYPES FROM OTHER SOURCES

NGC IC*	Bigay 1951		Pettit 1954		Humason, Mayall, Sandage 1956		Holmberg 1958	
2347	-	-	13.23	Sb	13.1	Sb	-	-
2403	8.8	Sc	9.20	Sc	8.8	Sc	8.80	Sc+



FIELD No. 310

7^h57^m $+65^\circ30'$

Survey Plate No. 1330

GC STARS

Nos.	R.A.	Decl.	m_p
	h m s	° ' "	
10186	7 33 36.2	+ 66 20 55	7.07
10441	7 42 23.5	+ 64 10 30	6.79
10777	7 55 46.7	+ 64 53 05	7.33
10851	7 58 02.9	+ 63 13 48	6.04
11183	8 11 01.8	+ 66 19 47	7.02
11561	8 25 04.8	+ 67 27 51	6.01

CLUSTERS OF GALAXIES

Cluster	Character	Population	Diameter in cm	Distance	Number on chart
0726.9 + 6634	medium compact	98	2.0	ED	29
0728.7 + 6607	open	96	1.9	ED	28
0729.5 + 6750	medium compact	150	3.2	VD	20
0733.4 + 6102	medium compact	1315	36.3	Near	2
0736.2 + 6341	medium compact	69	2.4	VD	1
0741.0 + 6552	medium compact	148	6.6	D	27
0741.1 + 6230	medium compact	63	1.2	ED	3
0742.2 + 6817	compact	78	1.7	ED	19
0749.2 + 6826	open	83	3.4	VD	17
0750.4 + 6413	medium compact	142	3.4	D	34
0752.3 + 6608	open	126	6.7	MD	26
0757.8 + 6345	medium compact	185	3.1	VD	33
0758.2 + 6531	compact	55	0.5	ED	25
0800.9 + 6835	open	71	1.7	ED	18
0805.2 + 6751	medium compact	228	4.9	MD	21
0808.5 + 6536	open	102	2.6	ED	23
0809.5 + 6639	compact	109	4.0	D	24
0812.7 + 6341	medium compact	143	5.2	D	32
0815.2 + 6803	compact	65	0.9	ED	6
0815.3 + 6637	open	96	2.1	ED	22
0816.0 + 6445	compact	63	1.6	ED	30
0816.6 + 6413	open	71	3.0	VD	31
0816.6 + 6603	open	177	2.6	ED	11
0817.0 + 6207	open	122	6.6	MD	35
0818.2 + 6715	open	106	2.1	VD	7
0818.7 + 6811	medium compact	197	4.2	D	5
0820.1 + 6438	medium compact	61	1.1	ED	14
0821.3 + 6529	medium compact	205	3.8	VD	12
0822.4 + 6406	compact	60	1.1	ED	15
0822.7 + 6226	compact	69	1.2	ED	36
0826.1 + 6554	compact	172	3.0	VD	10
0826.2 + 6805	medium compact	72	1.7	ED	4
0826.3 + 6323	medium compact	145	4.3	D	16
0827.0 + 6619	medium compact	104	1.5	ED	9
0829.2 + 6656	medium compact	176	4.7	VD	8
0837.1 + 6445	open	135	14.6	Near	13

Average number of galaxies per cluster = 148.8

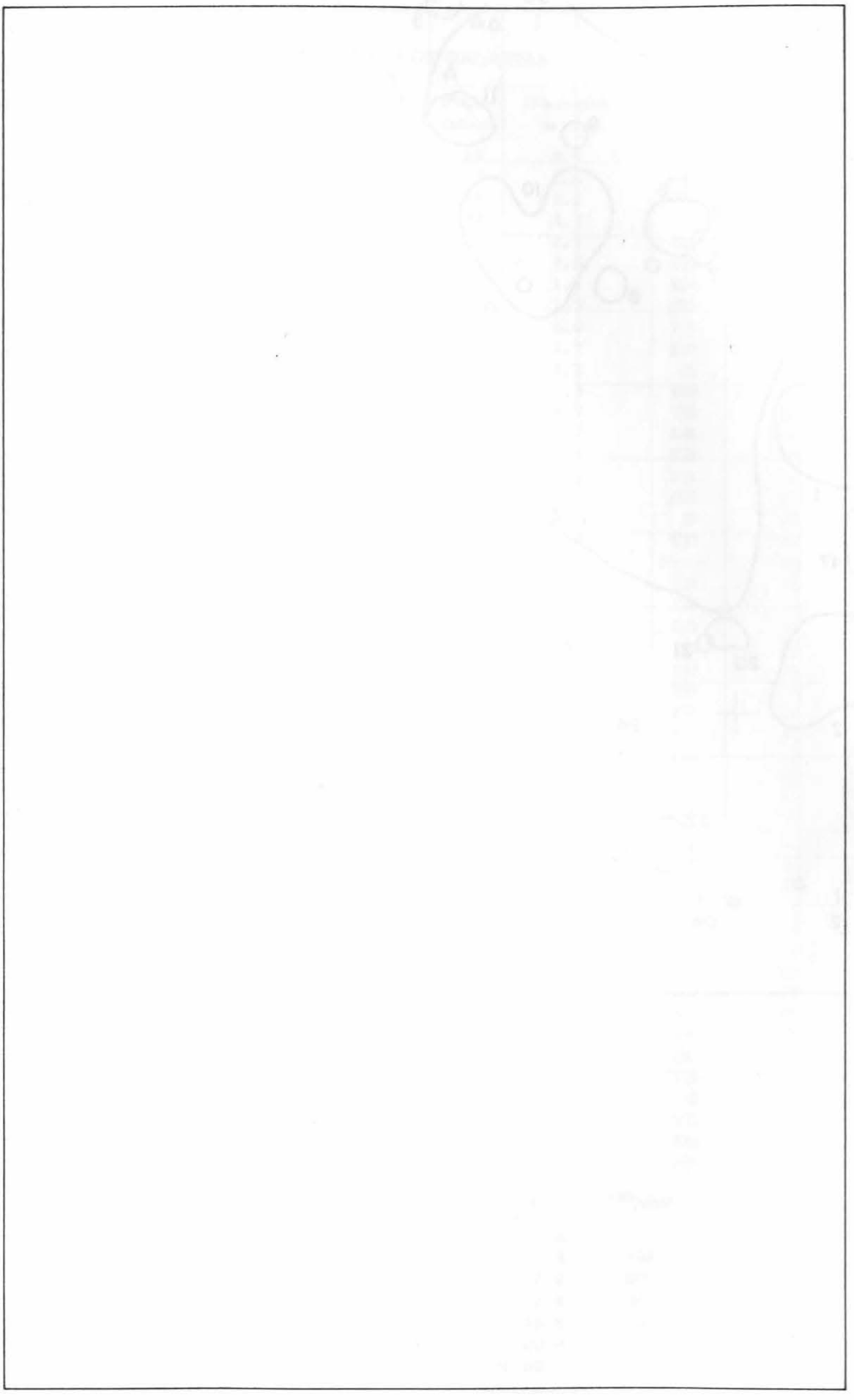
GALAXIES

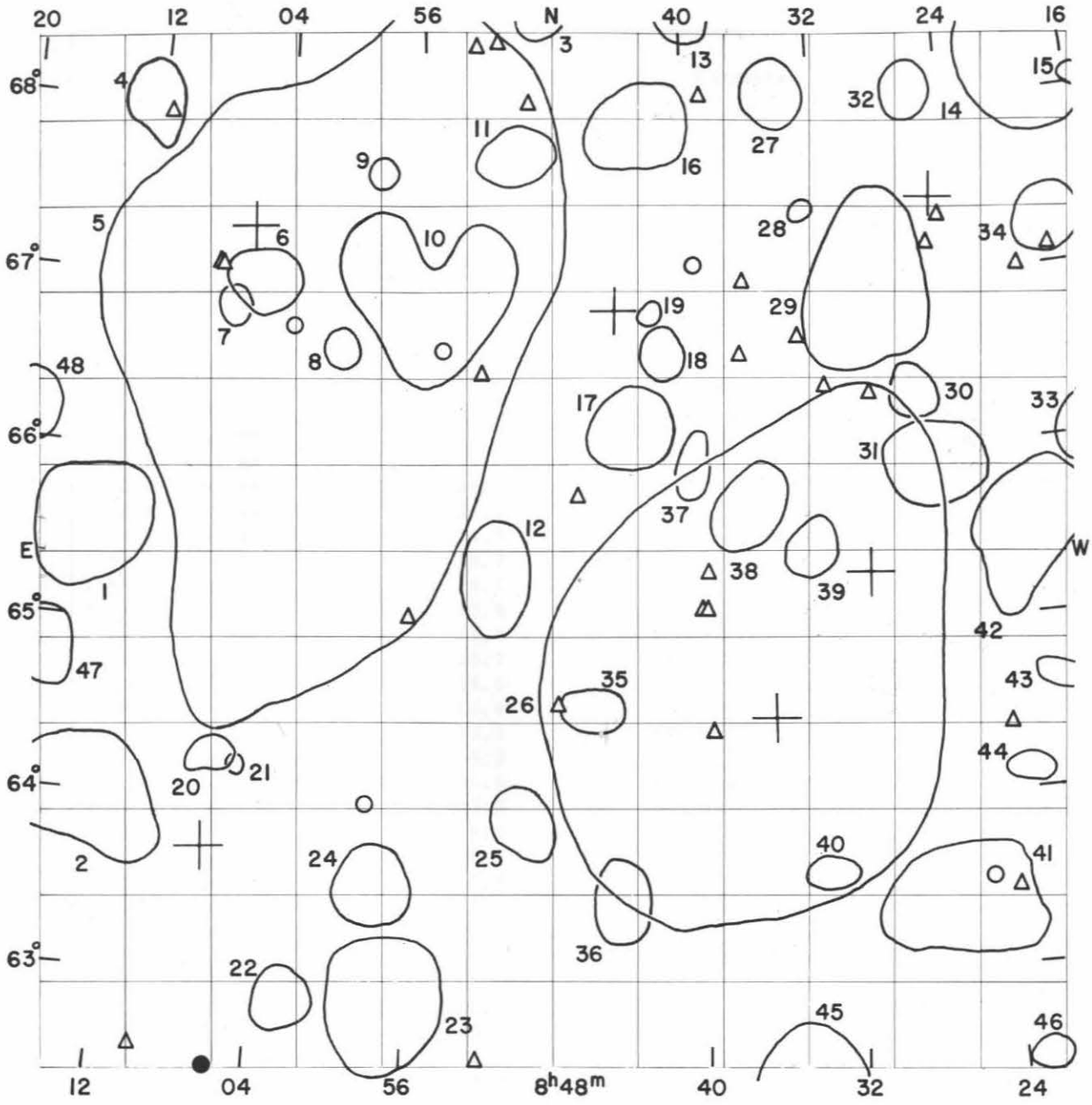
Position α 1950 h m	Position δ 1950 o '	NGC IC*	m_p	V_s km/sec	Remarks
7 29.0	+ 65 34		15.3		
7 30.3	+ 65 08		15.1		
7 32.0	+ 65 43	2403	9.3	+ 70	m_H = 10.2 Sc
7 32.9	+ 62 26		15.3		double system, halo
7 33.3	+ 63 38		15.7		
7 33.9	+ 63 44		15.7		compact, faint jets
7 35.0	+ 64 36		15.5		
7 36.2	+ 64 46		15.6		extremely compact
7 36.2	+ 65 41		15.2		double system
7 38.0	+ 66 22		15.2		
7 38.6	+ 64 23		15.6		
7 39.7	+ 67 23		14.8		

Position α 1950 h m	Position δ o '	NGC IC*	m_p	V_s km/sec	Remarks
7 40.9	+ 65 53		14.9		
7 41.9	+ 62 35		14.6		
7 43.5	+ 67 03		15.3		
7 43.8	+ 65 28		15.1		
7 44.0	+ 66 19		14.2		
7 44.6	+ 63 11		15.5		very compact
7 45.3	+ 65 12		15.7		
7 48.2	+ 62 40		15.4		
7 48.3	+ 68 13		15.0		
7 49.0	+ 64 01		15.2		compact
7 49.9	+ 62 59		15.0		double system
7 50.4	+ 63 08		15.6		
7 51.5	+ 62 43		15.6		
7 52.1	+ 63 44		14.9		
7 52.1	+ 66 44		14.4		
7 52.7	+ 66 34		14.5		
7 52.8	+ 66 25		15.7		very compact
7 53.0	+ 62 32		15.1		compact
7 58.6	+ 67 17		15.4		
7 59.7	+ 63 07		15.5		triple system
8 00.0	+ 65 32		15.7		very compact
8 00.4	+ 66 55		14.6		
8 02.7	+ 67 42		15.4		
8 03.8	+ 64 32		15.3		extremely compact
8 04.3	+ 64 43		15.6		
8 05.0	+ 63 44		15.6		extremely compact
8 05.2	+ 63 24		15.7		diffuse spiral
8 05.6	+ 67 23		14.5		
8 09.2	+ 64 30		15.1		double system
8 13.0	+ 64 43		15.5		double system
8 15.4	+ 65 29		15.7		
8 15.6	+ 62 59		15.0		
8 15.6	+ 67 07		14.4		extremely faint jets
8 17.0	+ 62 48		15.5		diffuse
8 17.2	+ 66 41		15.5		
8 18.2	+ 67 06		15.3		
8 18.6	+ 62 31		15.7		very compact
8 19.2	+ 64 30		15.4		
8 19.4	+ 62 26		15.4		
8 20.2	+ 62 46		15.6		
8 20.2	+ 67 00		15.1		
8 23.1	+ 64 23		15.1		
8 23.5	+ 63 26		15.2		
8 24.6	+ 67 20		15.6		
8 25.4	+ 67 11		15.4		compact

MAGNITUDES AND TYPES FROM OTHER SOURCES

NGC IC*	Bigay 1951		Pettit 1954		Humason, Mayall, Sandage 1956		Holmberg 1958	
2403	8.8	Sc	9.20	Sc	8.8	Sc	8.80	Sc+





FIELD No. 311

8^h48^m $+65^\circ30'$

Survey Plate No. 1286

GC STARS

Nos.	R.A.	Decl.	m_p
	h m s	° ' "	
11561	8 25 04.8	+ 67 27 51	6.01
11700	8 30 09.0	+ 65 19 04	5.39
11850	8 35 52.0	+ 64 30 17	4.76
12108	8 44 19.3	+ 66 53 36	6.15
12619	9 06 01.5	+ 67 20 21	4.87
12646	9 06 49.1	+ 63 43 07	4.74

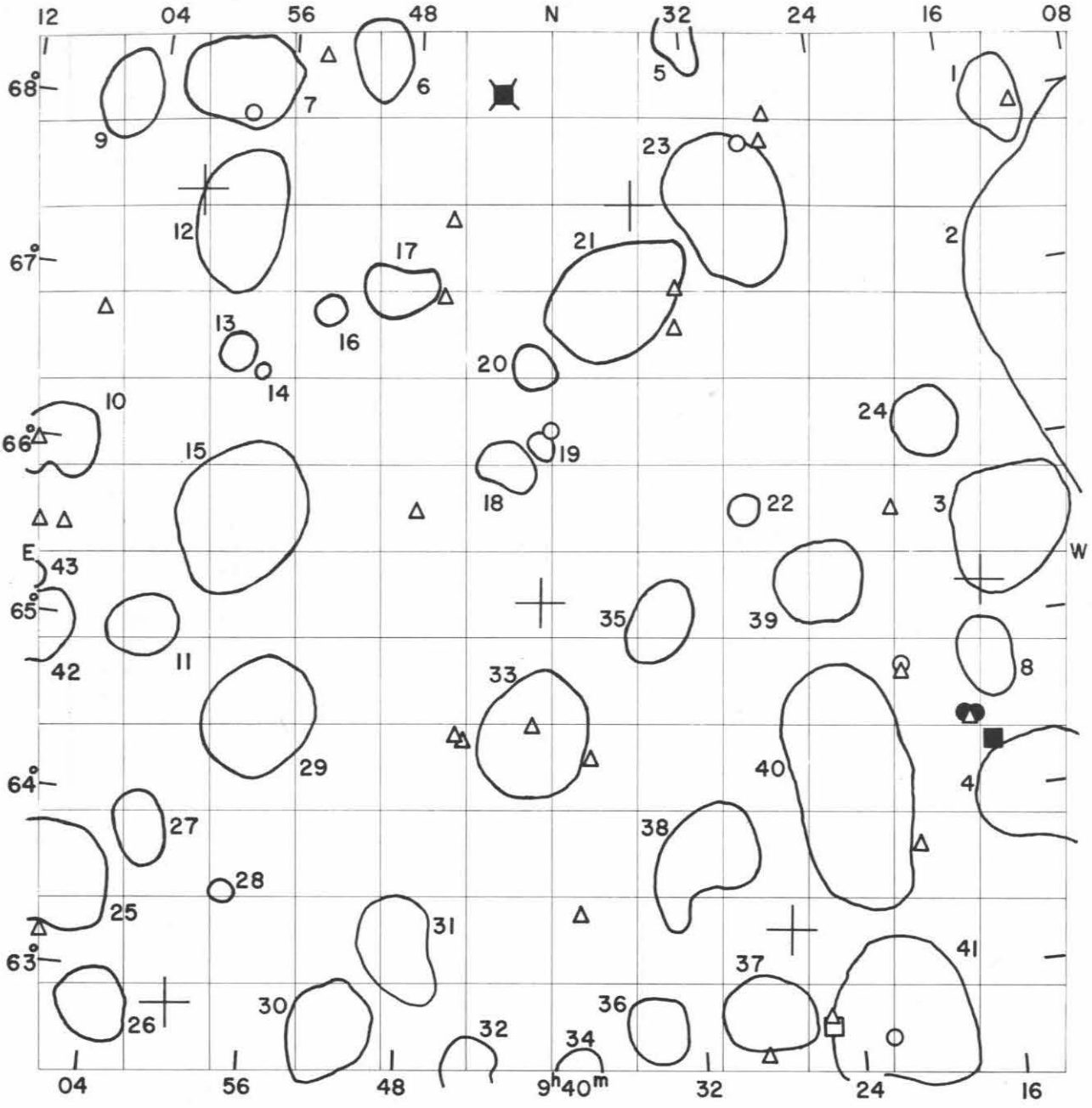
CLUSTERS OF GALAXIES

Cluster	Character	Population	Diameter in cm	Distance	Number on chart
0815.2 + 6803	compact	65	0.9	ED	15
0816.6 + 6603	open	177	2.6	ED	33
0818.2 + 6715	open	106	2.1	VD	34
0818.7 + 6811	medium compact	197	4.2	D	14
0820.1 + 6438	medium compact	61	1.1	ED	43
0821.3 + 6529	medium compact	205	3.8	VD	42
0822.4 + 6406	compact	60	1.1	ED	44
0822.7 + 6226	compact	69	1.2	ED	46
0826.1 + 6554	compact	172	3.0	VD	31
0826.2 + 6805	medium compact	72	1.7	ED	32
0826.3 + 6323	medium compact	145	4.3	D	41
0827.0 + 6619	medium compact	104	1.5	ED	30
0829.2 + 6656	medium compact	176	4.7	VD	29
0833.0 + 6725	compact	55	0.7	ED	28
0833.4 + 6335	compact	71	1.3	ED	40
0833.5 + 6529	open	80	1.7	ED	39
0834.4 + 6807	medium compact	90	2.1	ED	27
0834.6 + 6219	open	97	3.6	D	45
0836.9 + 6542	compact	116	2.5	ED	38
0837.1 + 6445	open	135	14.6	Near	26
0839.8 + 6837	medium compact	76	1.9	VD	13
0840.0 + 6557	open	79	1.5	ED	37
0841.5 + 6638	medium compact	65	1.5	ED	18
0842.2 + 6651	compact	45	0.7	ED	19
0842.7 + 6756	open	140	3.1	VD	16
0843.5 + 6612	open	124	2.7	VD	17
0844.4 + 6328	open	87	2.2	ED	36
0845.8 + 6435	open	56	1.7	ED	35
0848.8 + 6836	compact	80	1.6	ED	3
0849.7 + 6357	open	105	2.2	ED	25
0850.3 + 6747	medium compact	162	2.1	ED	11
0851.3 + 6521	compact	153	2.8	ED	12
0855.5 + 6658	open	105	4.9	D	10
0857.0 + 6253	medium compact	213	4.1	MD	23
0857.6 + 6332	compact	124	2.5	VD	24
0858.5 + 6740	compact	72	0.9	ED	9
0900.4 + 6639	medium compact	45	1.1	ED	8
0901.2 + 6640	open	189	16.7	Near	5
0902.2 + 6253	medium compact	83	2.0	ED	22
0905.0 + 6701	compact	139	2.2	VD	6
0905.2 + 6413	compact	35	0.6	ED	21
0906.4 + 6416	compact	75	1.3	VD	20
0906.9 + 6651	compact	55	1.0	ED	7
0912.6 + 6800	medium compact	124	2.1	ED	4
0913.1 + 6358	medium compact	220	4.3	D	2
0914.1 + 6533	medium compact	100	4.0	VD	1
0916.1 + 6448	open	108	2.1	ED	47
0918.4 + 6611	compact	87	2.2	ED	48

Average number of galaxies per cluster = 108.3

GALAXIES

Position α 1950 h m	Position δ o ′	NGC IC*	m_p	V_s km/sec	Remarks
8 18.2	+ 67 06		15.3		
8 20.2	+ 67 00		15.1		
8 23.1	+ 64 23		15.1		
8 23.5	+ 63 26		15.2		
8 24.6	+ 67 20		15.6		
8 24.7	+ 63 30		14.6		
8 25.4	+ 67 11		15.4		compact
8 29.5	+ 66 20		15.4		disrupted
8 32.1	+ 66 24		15.7		
8 33.6	+ 66 42		15.7		
8 36.6	+ 67 02		15.2		
8 37.0	+ 66 37		15.5		compact
8 38.7	+ 68 09		15.4		
8 39.2	+ 64 26		15.7		
8 39.3	+ 65 22		15.5		diffuse spiral
8 39.5	+ 67 08		14.5		
8 39.6	+ 65 10		15.4		very compact
8 39.7	+ 65 10		15.5		
8 46.5	+ 65 49		15.3		
8 47.6	+ 64 37		15.7		compact
8 49.5	+ 68 06		15.2		double system, connected
8 51.6	+ 68 28		15.5		
8 52.0	+ 62 33		15.3		compact
8 52.1	+ 66 31		15.6		compact
8 52.8	+ 68 27		15.7		
8 54.4	+ 66 40		14.2		
8 56.0	+ 65 06		15.5		
8 58.0	+ 64 00		15.0		
9 03.3	+ 66 46		14.3		
9 06.0	+ 62 27		14.0		
9 07.8	+ 67 06		15.6		
9 07.9	+ 67 06		15.6		
9 09.7	+ 62 32		15.1		
9 11.7	+ 67 58		15.6		



FIELD No. 312

9^h40^m $+65^o30'$

Survey Plate No. 708

GC STARS

Nos.	R.A.	Decl.	m_p
	h m s	o ' "	
12838	9 16 08.2	+ 65 13 39	7.62
13109	9 27 36.6	+ 63 16 55	3.75
13304	9 35 21.1	+ 67 29 56	6.28
13408	9 40 42.1	+ 65 12 49	6.18
13793	9 59 53.6	+ 62 48 34	7.44
13829	10 01 20.8	+ 67 31 22	7.11

CLUSTERS OF GALAXIES

Cluster	Character	Population	Diameter in cm	Distance	Number on chart
0901.2 + 6640	open	189	16.7	Near	2
0912.6 + 6800	medium compact	124	2.1	ED	1
0913.1 + 6358	medium compact	220	4.3	D	4
0914.1 + 6533	medium compact	100	4.0	VD	3
0916.1 + 6448	open	108	2.1	ED	8
0918.4 + 6611	compact	87	2.2	ED	24
0921.8 + 6244	medium compact	172	4.6	D	41
0923.7 + 6407	medium compact	193	5.4	MD	40
0925.1 + 6518	medium compact	101	2.8	ED	39
0928.9 + 6248	medium compact	121	2.7	VD	37
0929.0 + 6542	compact	55	0.9	ED	22
0929.3 + 6729	open	145	4.1	D	23
0932.0 + 6343	medium compact	92	3.2	VD	38
0932.2 + 6828	medium compact	58	1.5	ED	5
0934.0 + 6505	open	72	2.3	ED	35
0934.6 + 6244	open	100	2.1	ED	36
0936.4 + 6655	medium compact	162	4.0	MD	21
0938.6 + 6228	open	93	1.6	ED	34
0940.7 + 6605	medium compact	46	0.8	ED	19
0941.0 + 6426	compact	328	3.7	VD	33
0941.3 + 6633	open	77	1.4	ED	20
0942.7 + 6559	open	93	1.6	ED	18
0944.3 + 6230	medium compact	63	1.9	ED	32
0948.0 + 6312	medium compact	100	2.8	VD	31
0949.0 + 6700	medium compact	123	2.0	ED	17
0950.5 + 6820	medium compact	76	2.2	VD	6
0951.5 + 6243	compact	146	2.9	ED	30
0953.0 + 6651	compact	55	0.9	ED	16
0956.0 + 6430	open	133	3.6	D	29
0956.9 + 6630	compact	37	0.3	ED	14
0957.3 + 6329	medium compact	41	0.7	ED	28
0957.9 + 6538	medium compact	153	4.5	MD	15
0958.4 + 6635	medium compact	65	1.2	ED	13
0959.0 + 6722	compact	334	3.6	VD	12
0959.3 + 6810	medium compact	154	3.2	D	7
1002.0 + 6347	open	68	2.0	ED	27
1002.6 + 6458	medium compact	117	2.1	ED	11
1003.7 + 6246	compact	137	2.2	VD	26
1006.4 + 6802	medium compact	78	2.2	ED	9
1006.5 + 6328	open	170	3.8	VD	25
1008.1 + 6600	medium compact	132	2.3	VD	10
1008.4 + 6455	open	85	2.2	VD	42
1009.3 + 6512	compact	55	1.0	ED	43

Average number of galaxies per cluster = 117.6

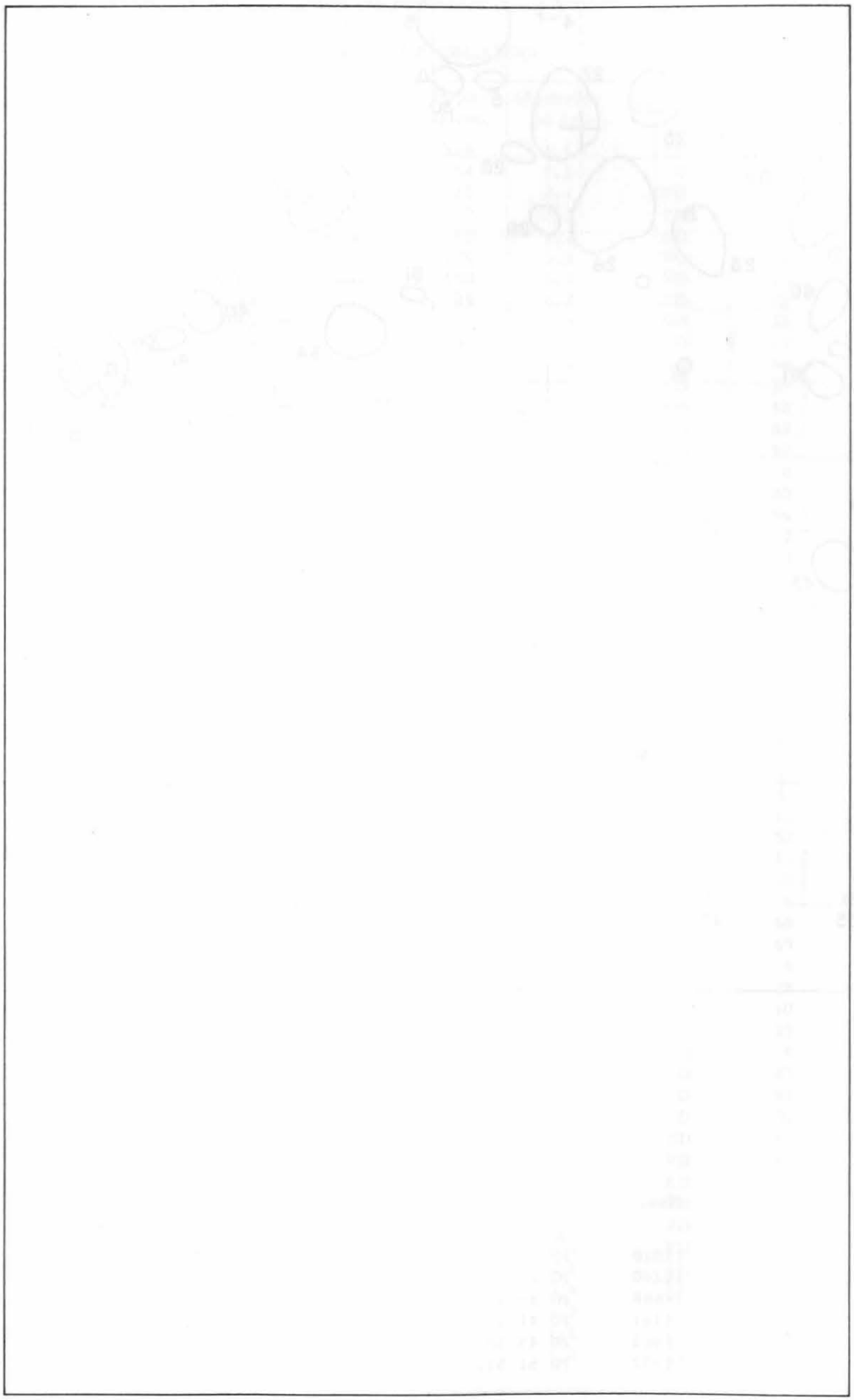
GALAXIES

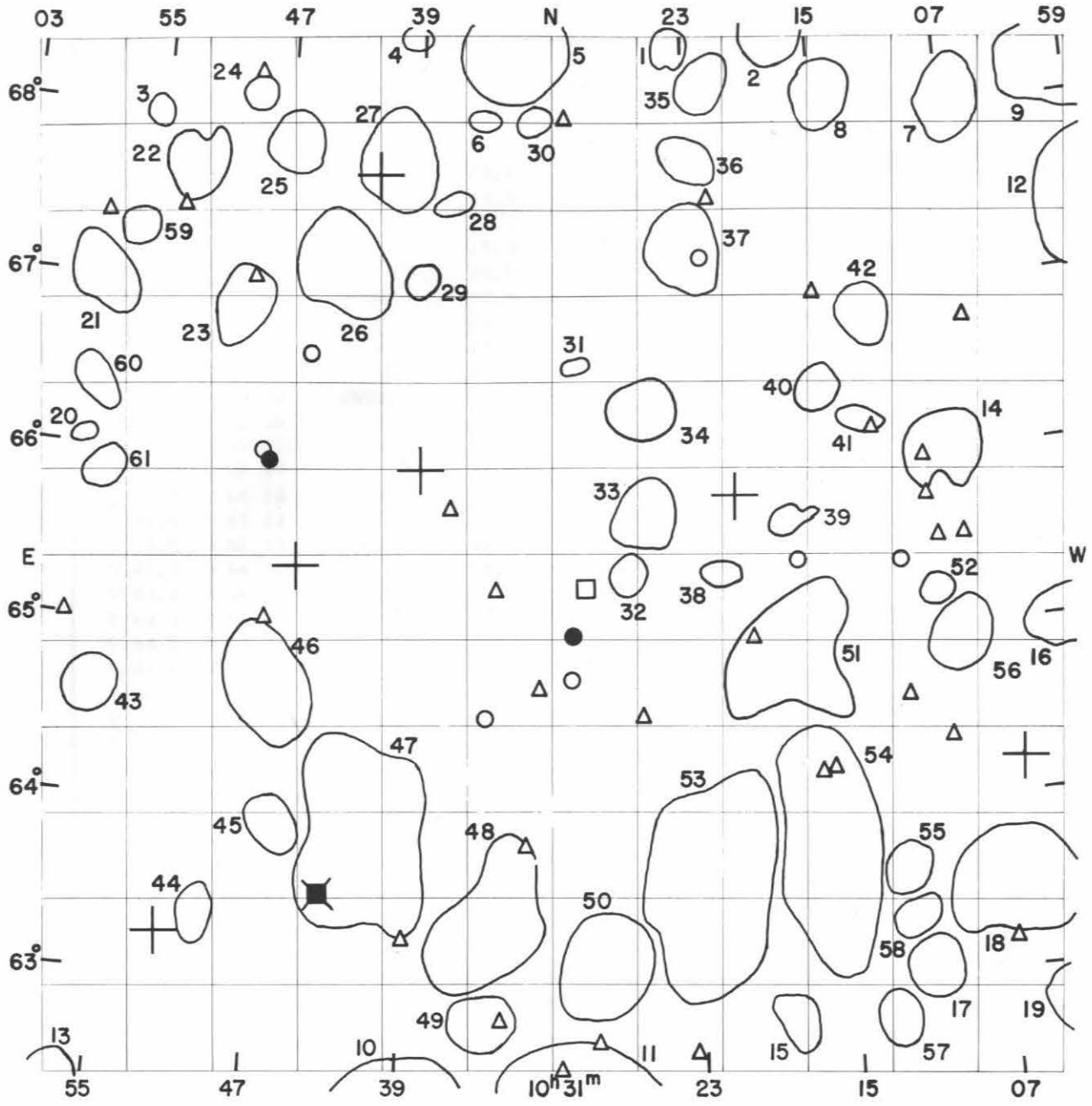
Position α 1950 δ (h m, o ')	NGC IC*	m_p	V_s km/sec	Remarks
9 11.7 + 67 58		15.6		
9 16.3 + 64 19	2805	11.9	+ 1916	
9 17.1 + 64 28	2814	14.0		
9 17.5 + 64 27	2458*	15.1		} connected double system
9 17.8 + 64 29	2820	13.1		} connected double system

Position α 1950 h m	Position δ ° '	NGC IC*	m_p	V_s km/sec	Remarks
9 20.6	+63 43		15.5		
9 20.9	+65 41		15.4		double system
9 21.0	+64 47		14.7		
9 21.1	+64 45		15.3		
9 22.6	+62 38		15.0		
9 25.7	+62 43	2880	12.6	+1514	m_H = 12.9 E
9 25.7	+62 46		15.1		very compact
9 27.1	+68 00		15.4		
9 27.3	+67 50		15.3		
9 28.6	+67 50	2892	14.4		
9 28.9	+62 34		15.6		
9 32.7	+67 01		15.5		
9 32.8	+66 47		15.5		
9 38.0	+64 18		15.7		
9 38.6	+63 24		15.6		
9 40.0	+66 13	2909	14.1		
9 41.2	+64 30		15.7		
9 43.1	+68 09	2976	10.9	+42	m_H = 11.2 Sc
9 44.9	+64 25		15.2		
9 45.4	+64 27		15.7		
9 46.0	+67 25		15.5		
9 46.4	+66 59		15.4		
9 47.8	+65 44		15.3		
9 54.3	+68 20		15.7		
9 58.8	+67 58		15.0		
10 06.6	+66 47		15.7		
10 06.7	+63 10		15.2		diffuse
10 07.7	+65 31		15.1		
10 09.0	+65 31		15.6		
10 09.7	+66 00		15.6		

MAGNITUDES AND TYPES FROM OTHER SOURCES

NGC IC*	Bigay 1951		Pettit 1954		Humason, Mayall, Sandage 1956		Holmberg 1958	
2805	-	-	-	-	-	Sc	11.68	Sc+
2820	-	-	-	-	-	-	13.16	Sc+
2880	-	-	12.66	SB0	12.6	SB0	-	-
2976	10.8	Sc	11.01	Sc	10.9	Sc	10.73	Sp





FIELD No. 313

10^h31^m $+65^\circ30'$

Survey Plate No. 662

GC STARS

Nos.	R.A.	Decl.	m_p
	h m s	° ' "	
13920	10 05 29.0	+ 64 11 52	6.75
14260	10 20 33.0	+ 65 49 12	4.92
14688	10 38 33.4	+ 65 58 44	5.12
14761	10 41 37.1	+ 67 40 27	6.32
14865	10 45 30.8	+ 65 23 48	6.24
14997	10 51 51.1	+ 63 12 59	8.3

CLUSTERS OF GALAXIES

Cluster	Character	Population	Diameter in cm	Distance	Number on chart
0959.0 + 6722	compact	334	3.6	VD	12
0959.3 + 6810	medium compact	154	3.2	D	9
1002.6 + 6458	medium compact	117	2.1	ED	16
1003.7 + 6246	compact	137	2.2	VD	19
1006.4 + 6802	medium compact	78	2.2	ED	7
1006.5 + 6328	open	170	3.8	VD	18
1008.1 + 6600	medium compact	132	2.3	VD	14
1008.4 + 6455	open	85	2.2	VD	56
1009.3 + 6512	compact	55	1.0	ED	52
1011.0 + 6302	open	91	1.8	D	17
1011.8 + 6320	medium compact	62	1.3	VD	58
1012.1 + 6336	medium compact	87	1.6	VD	55
1012.6 + 6649	medium compact	72	1.8	ED	42
1013.0 + 6613	medium compact	63	1.1	ED	41
1013.1 + 6244	medium compact	61	1.5	ED	57
1014.4 + 6807	compact	68	2.0	VD	8
1015.5 + 6624	compact	121	1.4	ED	40
1016.2 + 6347	open	139	5.0	MD	54
1017.2 + 6829	compact	139	2.1	ED	2
1017.5 + 6540	medium compact	65	1.1	ED	39
1017.8 + 6452	medium compact	131	4.0	VD	51
1018.4 + 6245	medium compact	87	1.5	ED	15
1021.6 + 6522	compact	71	1.0	ED	38
1021.9 + 6811	compact	135	1.7	ED	35
1022.6 + 6334	open	181	5.5	D	53
1022.8 + 6745	medium compact	100	1.6	ED	36
1023.1 + 6715	medium compact	92	2.5	ED	37
1023.7 + 6826	medium compact	65	1.2	ED	1
1025.6 + 6618	medium compact	101	2.1	VD	34
1025.7 + 6542	medium compact	125	2.2	VD	33
1026.8 + 6522	medium compact	53	1.2	ED	32
1027.9 + 6150	medium compact	160	7.7	Near	11
1028.3 + 6306	medium compact	163	3.3	D	50
1029.8 + 6635	compact	41	0.6	ED	31
1032.4 + 6759	medium compact	51	1.0	ED	30
1033.5 + 6823	medium compact	145	3.1	VD	5
1034.6 + 6320	open	105	4.0	D	48
1034.7 + 6246	open	73	2.0	ED	49
1035.2 + 6800	compact	57	0.8	ED	6
1037.1 + 6731	compact	75	0.9	ED	28
1038.5 + 6206	medium compact	110	4.8	D	10
1038.9 + 6704	open	55	1.0	ED	29
1039.7 + 6828	compact	67	0.8	ED	4
1040.4 + 6745	open	64	2.7	VD	27
1041.2 + 6350	open	118	5.3	D	47
1043.5 + 6708	open	104	3.0	D	26
1046.0 + 6354	medium compact	66	1.7	ED	45
1046.9 + 6441	open	84	3.2	VD	46
1047.0 + 6750	open	63	1.9	ED	25
1049.3 + 6805	compact	37	1.1	ED	24
1049.6 + 6652	medium compact	85	2.1	VD	23
1049.8 + 6321	medium compact	88	1.4	ED	44
1053.0 + 6740	compact	91	2.1	VD	22
1055.6 + 6757	compact	49	0.9	ED	3
1056.0 + 6717	compact	55	1.2	ED	59
1056.5 + 6218	compact	88	1.8	ED	13
1056.5 + 6437	medium compact	78	1.8	ED	43

Cluster	Character	Population	Diameter in cm	Distance	Number on chart
1057.0 + 6551	compact	70	1.3	VD	61
1057.8 + 6623	open	75	1.5	ED	60
1057.8 + 6700	medium compact	89	2.2	VD	21
1058.3 + 6603	compact	36	0.6	ED	20

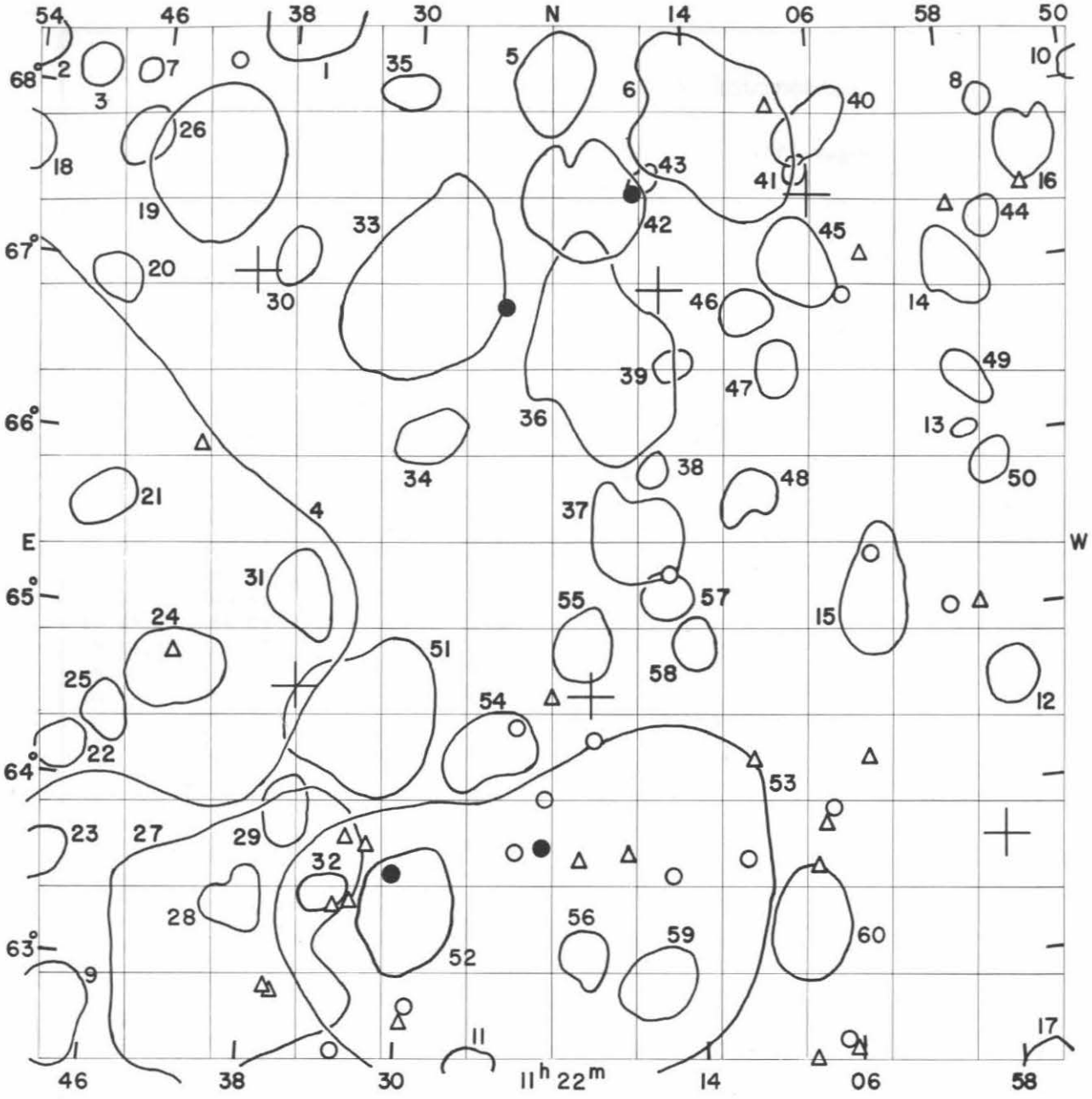
Average number of galaxies per cluster = 95.3

GALAXIES

Position α 1950 h m	Position δ o '	NGC IC*	m_p	V_s km/sec	Remarks
10 06.6	+ 66 47		15.7		
10 06.7	+ 63 10		15.2		diffuse
10 07.7	+ 65 31		15.1		
10 09.0	+ 65 31		15.6		
10 09.1	+ 64 22		15.7		diffuse
10 09.6	+ 65 46		15.3		compact
10 09.7	+ 66 00		15.6		
10 11.2	+ 64 37		15.7		very compact
10 11.3	+ 65 24		14.4		
10 12.5	+ 66 10		15.1		
10 15.4	+ 64 14		15.2		double system
10 15.4	+ 66 58		15.7		
10 16.2	+ 64 13		15.5		
10 17.0	+ 65 26		14.1		
10 19.6	+ 65 00		15.7		
10 21.5	+ 67 32		15.7		
10 22.1	+ 67 12		15.0		
10 23.4	+ 62 37		15.6		
10 25.9	+ 64 34		15.4		
10 28.5	+ 62 41		15.5		
10 29.0	+ 65 19	3259	12.9	+ 1866	m_H = 12.9 S
10 29.7	+ 65 01	3266	13.5		
10 29.8	+ 64 46		15.0		
10 30.3	+ 68 01		15.5		compact
10 30.4	+ 62 31		15.7		compact
10 31.6	+ 64 43		15.4		
10 32.3	+ 63 48		15.5		double system
10 33.6	+ 62 48		15.5		
10 34.0	+ 65 17		15.7		
10 34.5	+ 64 32		14.4		very compact
10 36.8	+ 65 45		15.6		
10 38.8	+ 63 16		15.6		very compact
10 43.3	+ 63 30	3359	11.0	+ 1008	m_H = 12.2 S
10 45.2	+ 66 37		14.5		double system
10 47.0	+ 65 05		15.2		
10 47.2	+ 65 59	3394	13.1		
10 47.6	+ 66 02	3392	14.8		
10 48.8	+ 67 02		15.4		
10 49.2	+ 68 14		15.6		diffuse irregular
10 53.4	+ 67 28		15.4		quadruple system
10 58.0	+ 67 23		15.6		
10 58.1	+ 65 02		15.3		

MAGNITUDES AND TYPES FROM OTHER SOURCES

NGC IC*	Bigay 1951		Pettit 1954		Humason, Mayall, Sandage 1956		Holmberg 1958	
3259	-	-	-	-	-	Sb	-	-
3359	-	-	11.05	SBb	10.9	SBc	10.89	Sc-



FIELD No. 314

11^h22^m $+65^\circ30'$

Survey Plate No. 977

GC STARS

Nos.	R.A.	Decl.	m_p
	h m s	° ' "	
15122	10 57 57.4	+ 63 41 26	6.34
15332	11 06 30.9	+ 67 28 55	6.09
15544	11 15 44.5	+ 66 57 28	7.12
15619	11 19 54.1	+ 64 36 16	5.98
15974	11 36 01.6	+ 64 37 26	6.8
16072	11 39 42.1	+ 67 01 18	5.48

CLUSTERS OF GALAXIES

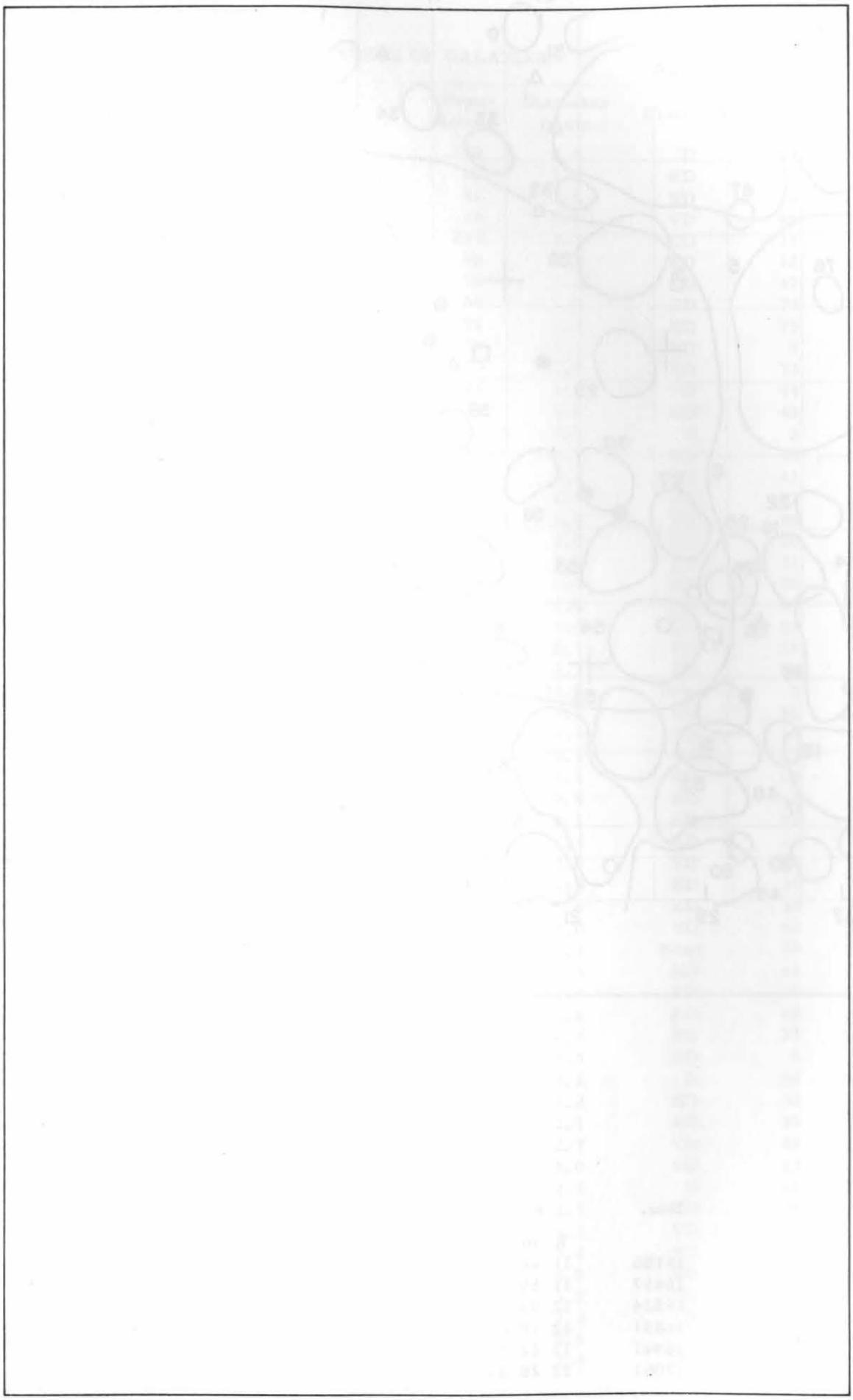
Cluster	Character	Population	Diameter in cm	Distance	Number on chart
1049.3 + 6805	compact	37	1.1	ED	10
1053.0 + 6740	compact	91	2.1	VD	16
1055.6 + 6757	compact	49	0.9	ED	8
1056.0 + 6717	compact	55	1.2	ED	44
1056.5 + 6218	compact	88	1.8	ED	17
1056.5 + 6437	medium compact	78	1.8	ED	12
1057.0 + 6551	compact	70	1.3	VD	50
1057.8 + 6623	open	75	1.5	ED	49
1057.8 + 6700	medium compact	89	2.2	VD	14
1058.3 + 6603	compact	36	0.6	ED	13
1104.0 + 6507	open	112	2.9	VD	15
1106.3 + 6752	medium compact	92	2.0	VD	40
1107.4 + 6705	medium compact	111	2.4	D	45
1107.5 + 6738	medium compact	81	0.7	ED	41
1108.3 + 6315	compact	156	3.0	VD	60
1108.9 + 6629	compact	89	1.4	ED	47
1110.5 + 6649	open	61	1.5	ED	46
1110.6 + 6545	open	87	1.6	ED	48
1112.0 + 6752	compact	202	5.2	VD	6
1114.0 + 6453	medium compact	70	1.5	ED	58
1115.0 + 6631	compact	54	1.1	ED	39
1115.6 + 6511	compact	80	1.5	ED	57
1116.1 + 6554	compact	41	1.0	ED	38
1116.3 + 6256	medium compact	115	2.2	VD	59
1116.5 + 6736	compact	51	0.9	ED	43
1117.2 + 6531	compact	233	3.0	ED	37
1119.1 + 6633	open	211	5.3	VD	36
1120.2 + 6305	medium compact	67	1.6	VD	56
1120.2 + 6454	compact	111	2.1	VD	55
1120.2 + 6728	medium compact	114	3.7	MD	42
1122.0 + 6811	medium compact	90	2.8	VD	5
1122.3 + 6317	open	156	13.1	Near	53
1125.1 + 6417	medium compact	149	2.7	VD	54
1126.0 + 6226	open	68	1.4	ED	11
1129.0 + 6606	open	85	1.9	ED	34
1129.5 + 6321	medium compact	184	3.4	VD	52
1129.8 + 6658	compact	354	5.3	D	33
1130.8 + 6805	medium compact	68	1.4	ED	35
1132.0 + 6428	open	106	4.6	D	51
1134.0 + 6326	compact	91	1.3	ED	32
1135.9 + 6510	open	109	2.3	ED	31
1136.1 + 6353	compact	64	1.7	VD	29
1137.3 + 6707	open	62	1.5	ED	30
1137.4 + 6842	open	105	4.0	D	1
1138.4 + 6322	medium compact	105	1.9	ED	28
1138.6 + 6305	open	165	8.4	MD	27
1142.5 + 6737	compact	150	4.5	D	19
1142.6 + 6440	open	98	2.8	VD	24
1146.3 + 6423	medium compact	87	1.5	ED	25
1147.0 + 6744	medium compact	91	1.6	ED	26
1147.3 + 6537	medium compact	95	1.8	VD	21
1147.4 + 6237	compact	244	2.7	ED	9
1147.6 + 6807	compact	43	0.7	ED	7
1147.8 + 6654	compact	70	1.5	ED	20
1148.3 + 6408	medium compact	68	1.5	ED	22
1148.9 + 6332	compact	91	1.7	ED	23
1150.7 + 6807	medium compact	73	1.3	VD	3

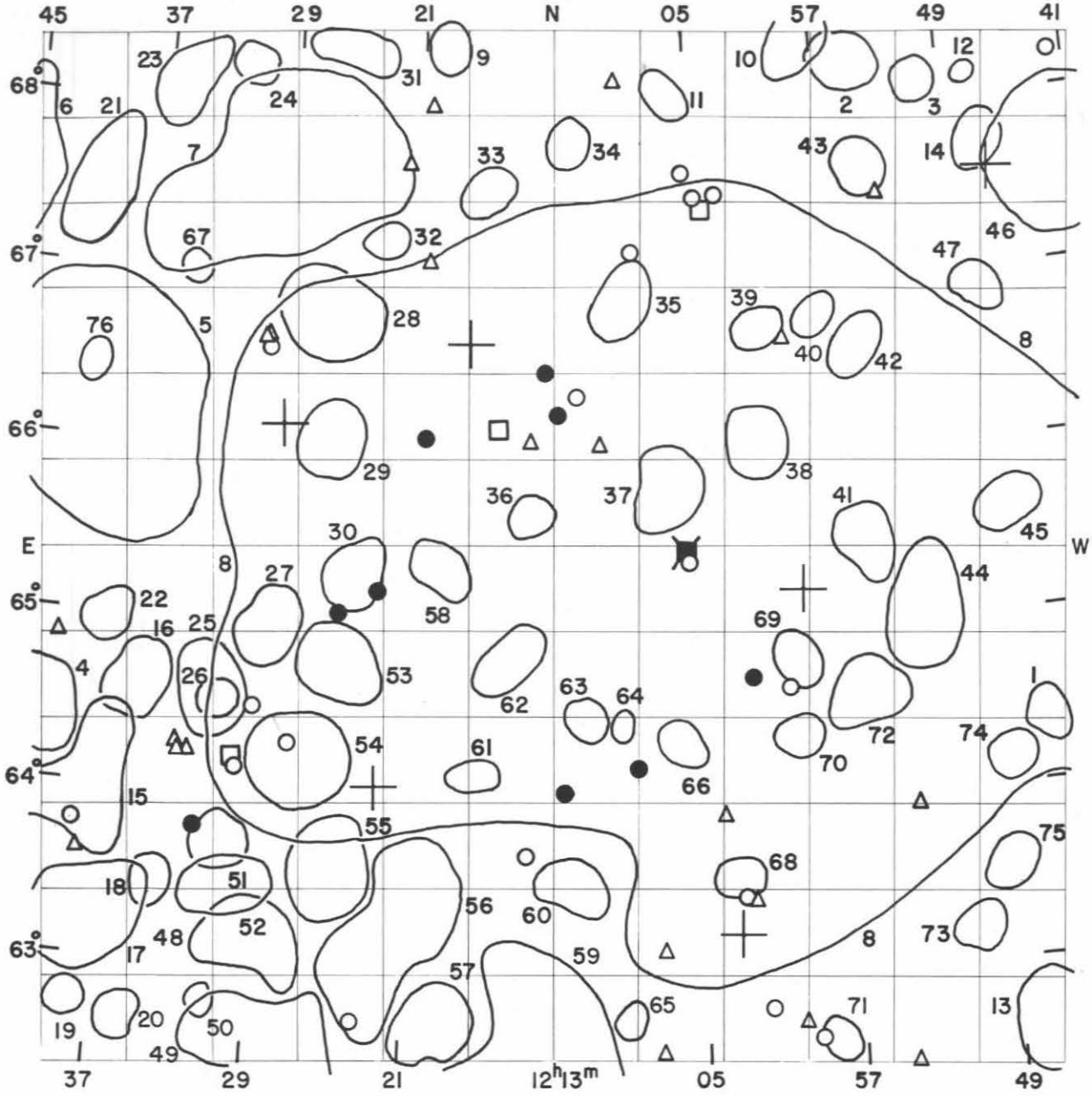
Cluster	Character	Population	Diameter in cm	Distance	Number on chart
1154.5 + 6738	open	77	1.8	ED	18
1155.2 + 6817	medium compact	121	2.0	D	2
1204.8 + 6520	open	515	26.7	Near	4

Average number of galaxies per cluster = 109.8

GALAXIES

Position α 1950 h m	Position δ o ′	NGC IC*	m_p	V_s km/sec	Remarks
10 53.4	+ 67 28		15.4		quadruple system
10 58.0	+ 67 23		15.6		
10 58.1	+ 65 02		15.3		
10 59.9	+ 65 03		14.8		compact
11 03.7	+ 67 08		15.5		
11 04.1	+ 65 22		15.0		double nebula
11 04.7	+ 66 53		14.6		
11 04.8	+ 64 12		15.7		diffuse spiral
11 06.3	+ 62 31		15.7		
11 06.7	+ 62 34		14.9		
11 06.9	+ 63 55		14.8		
11 07.4	+ 63 49		15.7		
11 07.9	+ 63 35		15.7		
11 08.4	+ 62 28		15.6		
11 08.8	+ 68 01		15.2		double system
11 11.1	+ 64 13		15.3		compact
11 11.6	+ 63 38		15.0		
11 15.4	+ 65 19		14.4		double system
11 15.6	+ 63 33		14.8		very compact
11 17.2	+ 67 31	3622	13.7		
11 17.9	+ 63 41		15.3		
11 19.8	+ 64 21		14.7		
11 20.5	+ 63 39		15.7		
11 22.0	+ 64 35		15.6		
11 22.4	+ 64 01		14.1		
11 22.5	+ 63 43	3668	13.1		
11 23.9	+ 64 25		14.9		
11 24.0	+ 63 42		14.7		compact
11 24.7	+ 66 52	3682	13.4		
11 29.6	+ 62 48		14.1		
11 29.8	+ 62 43		15.2		
11 30.4	+ 63 34		13.3		
11 31.9	+ 63 43		15.7		
11 32.6	+ 63 25		15.5		
11 33.0	+ 63 46		15.3		compact
11 33.3	+ 62 32		14.6		
11 33.5	+ 63 23		15.1		
11 36.5	+ 62 51		15.6		
11 36.8	+ 62 53		15.5		
11 41.8	+ 68 13		14.9		
11 42.2	+ 66 00		15.5		
11 42.9	+ 64 47		15.4		double system





FIELD No. 315

12^h13^m $+65^\circ30'$

Survey Plate No. 674

GC STARS

Nos.	R.A.	Decl.	m_p
	h m s	° ' "	
16186	11 46 28.1	+ 67 36 24	7.17
16437	11 59 04.2	+ 65 13 04	7.25
16524	12 03 08.8	+ 63 12 44	6.24
16831	12 18 02.1	+ 66 40 06	7.12
16941	12 22 47.0	+ 64 04 46	6.37
17061	12 28 44.2	+ 66 10 26	6.72

CLUSTERS OF GALAXIES

Cluster	Character	Population	Diameter in cm	Distance	Number on chart
1142.5 + 6737	compact	150	4.5	D	46
1146.3 + 6423	medium compact	87	1.5	ED	1
1147.0 + 6744	medium compact	91	1.6	ED	14
1147.3 + 6537	medium compact	95	1.8	VD	45
1147.4 + 6237	compact	244	2.7	ED	13
1147.6 + 6807	compact	43	0.7	ED	12
1147.8 + 6654	compact	70	1.5	ED	47
1148.3 + 6408	medium compact	68	1.5	ED	74
1148.9 + 6332	compact	91	1.7	ED	75
1150.7 + 6807	medium compact	73	1.3	VD	3
1150.9 + 6310	medium compact	79	1.6	ED	73
1152.5 + 6501	open	125	3.1	VD	44
1154.5 + 6738	open	77	1.8	ED	43
1155.2 + 6817	medium compact	121	2.0	D	2
1155.4 + 6636	medium compact	81	1.7	ED	42
1155.5 + 6528	medium compact	118	2.1	ED	41
1155.9 + 6435	compact	142	2.3	ED	72
1157.7 + 6647	compact	64	1.3	ED	40
1158.0 + 6823	compact	86	2.0	VD	10
1158.3 + 6235	medium compact	56	1.3	ED	71
1159.6 + 6421	medium compact	73	1.5	ED	70
1159.6 + 6448	medium compact	65	1.6	ED	69
1201.1 + 6644	open	63	1.4	ED	39
1201.5 + 6604	medium compact	111	2.1	VD	38
1203.2 + 6332	compact	62	1.5	ED	68
1204.8 + 6520	open	515	26.7	Near	8
1206.0 + 6420	compact	89	1.5	ED	66
1206.2 + 6805	medium compact	69	1.4	ED	11
1206.7 + 6548	medium compact	90	2.3	VD	37
1209.0 + 6243	medium compact	49	1.1	ED	65
1209.3 + 6427	compact	55	0.8	ED	64
1209.3 + 6654	open	113	2.1	ED	35
1211.3 + 6428	compact	55	1.4	ED	63
1212.1 + 6329	compact	60	2.0	VD	60
1212.4 + 6749	compact	91	1.4	ED	34
1214.4 + 6540	medium compact	63	1.4	ED	36
1215.5 + 6449	medium compact	112	2.0	VD	62
1216.5 + 6148	open	135	10.2	Near	59
1217.3 + 6408	medium compact	59	1.3	ED	61
1217.3 + 6733	open	83	1.6	ED	33
1219.3 + 6520	medium compact	78	1.8	ED	58
1219.4 + 6241	medium compact	119	2.4	VD	57
1219.7 + 6821	medium compact	71	1.5	ED	9
1222.0 + 6312	medium compact	158	4.6	D	56
1223.2 + 6715	compact	69	1.2	ED	32
1224.4 + 6517	open	103	2.1	ED	30
1225.0 + 6445	compact	138	2.7	VD	53
1225.1 + 6334	compact	173	3.0	VD	55
1225.7 + 6820	open	93	2.1	D	31
1226.0 + 6604	medium compact	104	2.3	VD	29
1226.3 + 6648	medium compact	134	3.2	VD	28
1227.0 + 6411	medium compact	94	3.2	VD	54
1227.8 + 6232	open	114	4.0	VD	49
1228.9 + 6307	compact	176	3.0	ED	48
1229.0 + 6456	medium compact	107	2.2	D	27
1229.3 + 6733	compact	226	6.8	D	7
1230.4 + 6326	medium compact	102	2.4	VD	52

Cluster	Character	Population	Diameter in cm	Distance	Number on chart
1231.0 + 6342	medium compact	119	1.8	ED	51
1231.3 + 6246	compact	58	0.9	ED	50
1231.4 + 6432	compact	55	1.2	ED	26
1231.9 + 6435	medium compact	72	2.5	D	25
1231.9 + 6814	medium compact	67	1.4	ED	24
1234.4 + 6327	compact	172	1.5	ED	18
1234.7 + 6701	compact	52	1.0	ED	67
1235.5 + 6239	open	56	1.5	ED	20
1235.9 + 6436	medium compact	195	2.2	VD	16
1236.2 + 6806	open	90	2.3	D	23
1237.8 + 6313	open	154	3.5	D	17
1237.8 + 6457	medium compact	79	1.6	ED	22
1238.0 + 6359	open	195	3.5	D	15
1238.2 + 6244	medium compact	104	1.3	ED	19
1238.7 + 6610	open	189	7.3	MD	5
1240.0 + 6625	medium compact	51	1.2	ED	76
1240.7 + 6728	open	104	3.1	VD	21
1241.1 + 6425	medium compact	108	2.8	VD	4
1249.1 + 6726	medium compact	149	6.5	MD	6

Average number of galaxies per cluster = 106.6

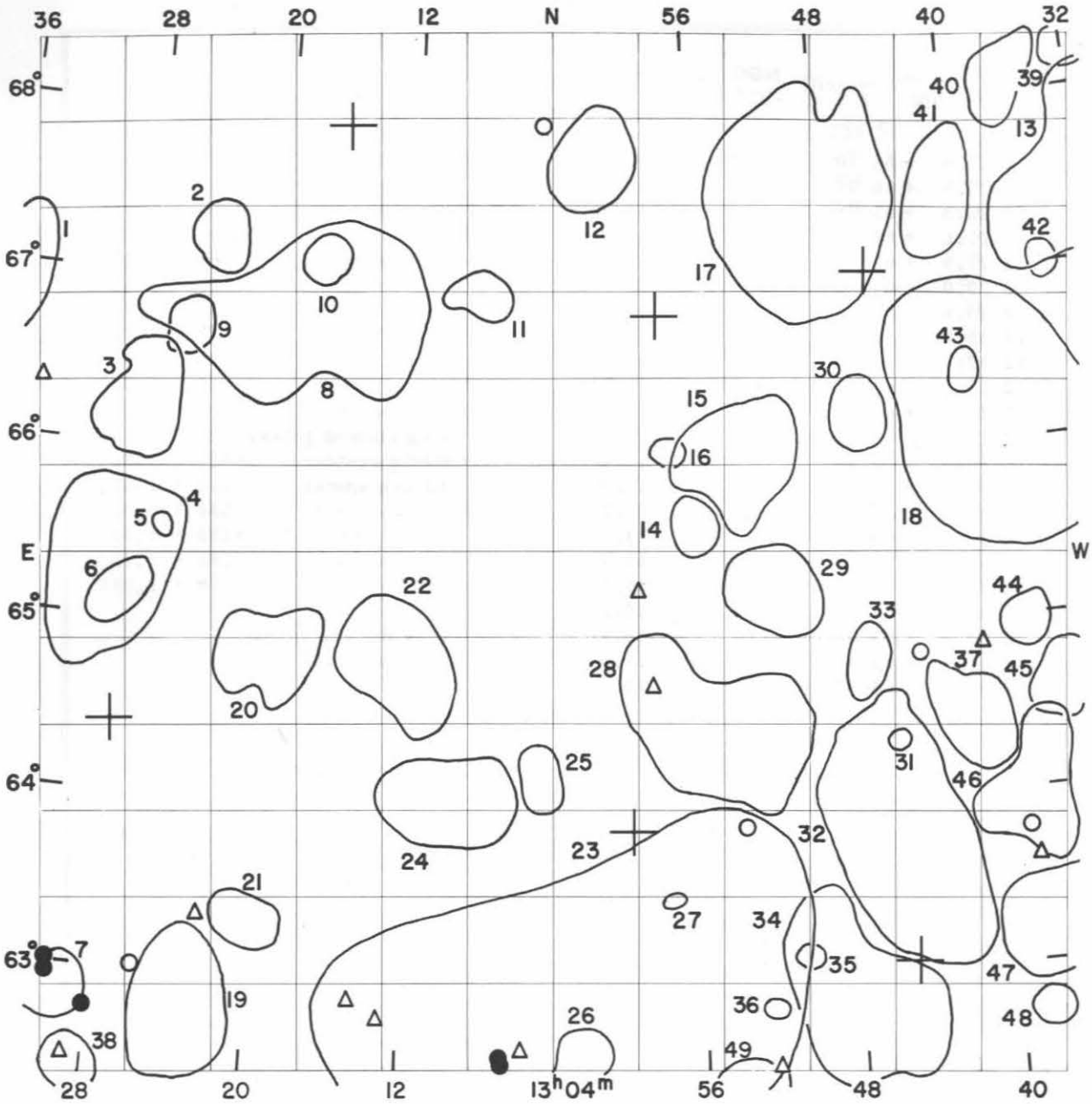
GALAXIES

Position α 1950 h m	Position δ o '	NGC IC*	m_p	V_s km/sec	Remarks
11 41.8	+ 68 13		14.9		
11 53.3	+ 67 30		15.6		
11 53.4	+ 63 55		15.7		compact
11 54.3	+ 62 27		15.7		compact
11 59.2	+ 62 37		14.5		
11 59.6	+ 66 40		15.2		very compact nucleus
11 59.9	+ 62 42		15.6		diffuse spiral
12 00.1	+ 64 39		14.3		
12 01.7	+ 62 47		14.4		
12 02.0	+ 64 43	4081	13.6		
12 02.4	+ 63 25		15.1		
12 02.9	+ 63 26		14.9		
12 03.3	+ 67 31		14.7		
12 03.8	+ 63 55		15.6		double system, long bridge
12 04.2	+ 67 26	4108	13.0		
12 04.7	+ 67 30		14.5		
12 05.3	+ 67 40		14.7		
12 05.5	+ 65 23	4121	14.6		
12 05.6	+ 65 27	4125	10.9	+ 1395	m_H = 11.3 E
12 07.3	+ 63 08		15.7		
12 07.4	+ 62 33		15.1		
12 08.5	+ 64 12		14.0		
12 08.5	+ 67 12		15.0		
12 09.4	+ 68 12		15.4		
12 10.4	+ 66 05		15.3		compact
12 11.7	+ 66 22		15.0		
12 12.5	+ 64 04	4205	13.8		
12 12.8	+ 66 15	4210	13.4		
12 13.6	+ 66 30	4221	13.6		
12 14.4	+ 66 06		15.5		
12 14.5	+ 63 42	4238	14.2		

Position α 1950 h m	Position δ ° ′	NGC IC*	m_p	V_s km/sec	Remarks
12 16.4	+ 66 10	4256	12.7	+ 2583	m_H = 13.0
12 20.5	+ 66 07	4332	13.2		
12 20.5	+ 67 08		15.4		compact
12 20.6	+ 68 01		15.7		
12 21.9	+ 67 43		15.5		very compact
12 23.0	+ 65 13	4391	13.8		
12 23.6	+ 62 43		15.0		
12 25.0	+ 65 05	4441	13.5		
12 27.6	+ 64 19	4481	14.9		
12 29.5	+ 64 31	4510	14.2		
12 29.7	+ 66 36	4513	14.1		
12 29.8	+ 66 40		15.6		ring shaped galaxy
12 30.0	+ 66 40		15.7		triple system
12 30.4	+ 64 10	4512	14.7		diffuse spiral
12 30.6	+ 64 13	4521	13.0		
12 32.4	+ 63 48	4545	13.1		
12 32.9	+ 64 14		15.7		
12 33.4	+ 64 15		15.1		
12 33.5	+ 64 16		15.3		
12 38.4	+ 63 37		15.4		very diffuse spiral
12 38.8	+ 63 47		14.8		diffuse spiral
12 40.5	+ 64 52		15.5		

MAGNITUDES AND TYPES FROM OTHER SOURCES

NGC IC*	Bigay 1951		Pettit 1954		Humason, Mayall, Sandage 1956		Holmberg 1958	
4125	-	-	-	-	10.9	E6	-	-
4256	-	-	-	-	-	Sb	-	-



FIELD No. 316

13^h04^m $+65^o30'$

Survey Plate No. 717

GC STARS

Nos.	R.A.	Decl.	m_p
	h m s	o ' "	
17377	12 45 11.3	+ 63 03 13	5.83
17387	12 45 32.2	+ 67 03 47	5.67
17651	12 58 02.1	+ 66 52 00	5.50
17690	12 59 50.0	+ 63 52 43	6.02
18018	13 16 32.4	+ 67 57 03	7.32
18258	13 28 12.1	+ 64 26 17	7.05

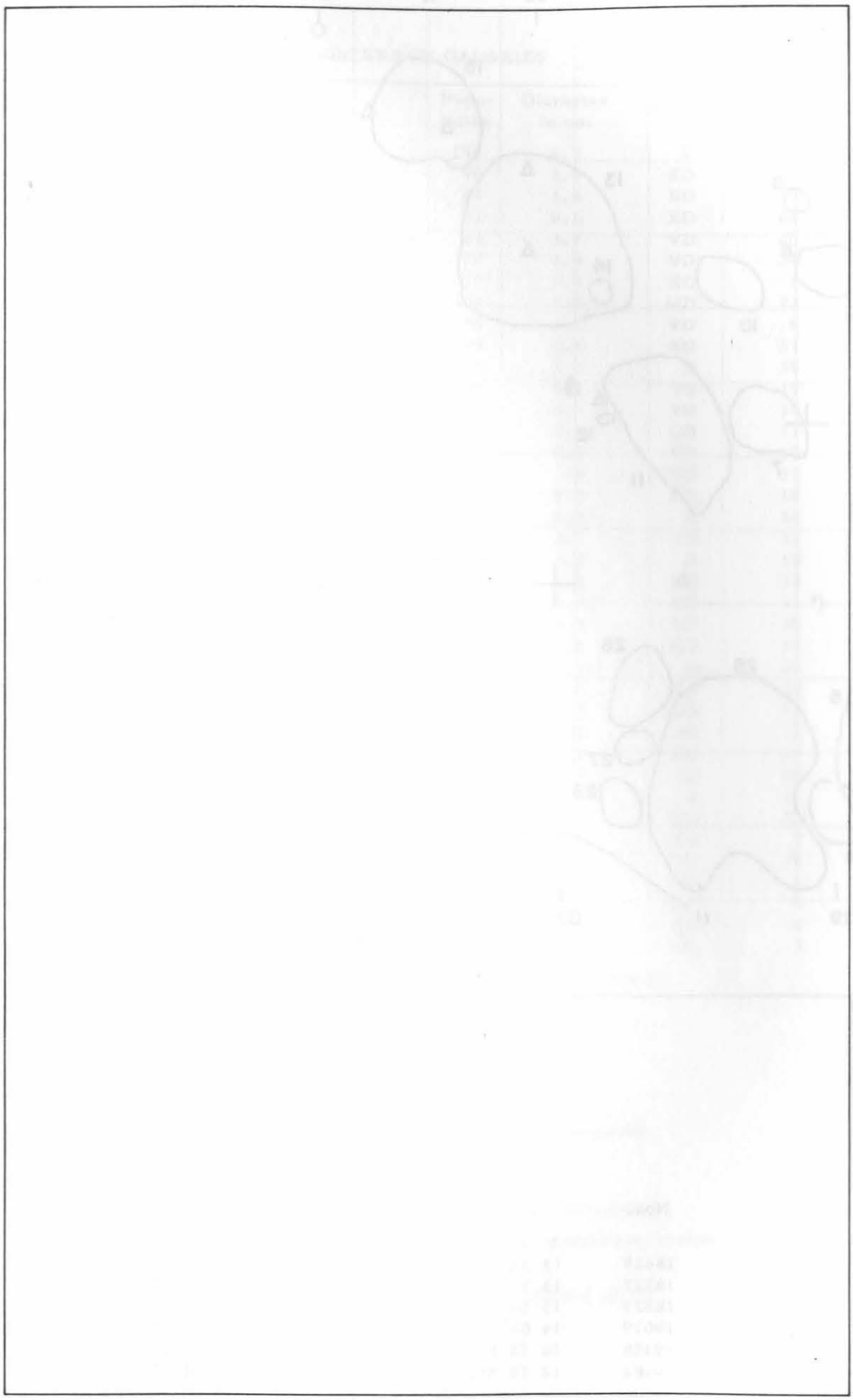
CLUSTERS OF GALAXIES

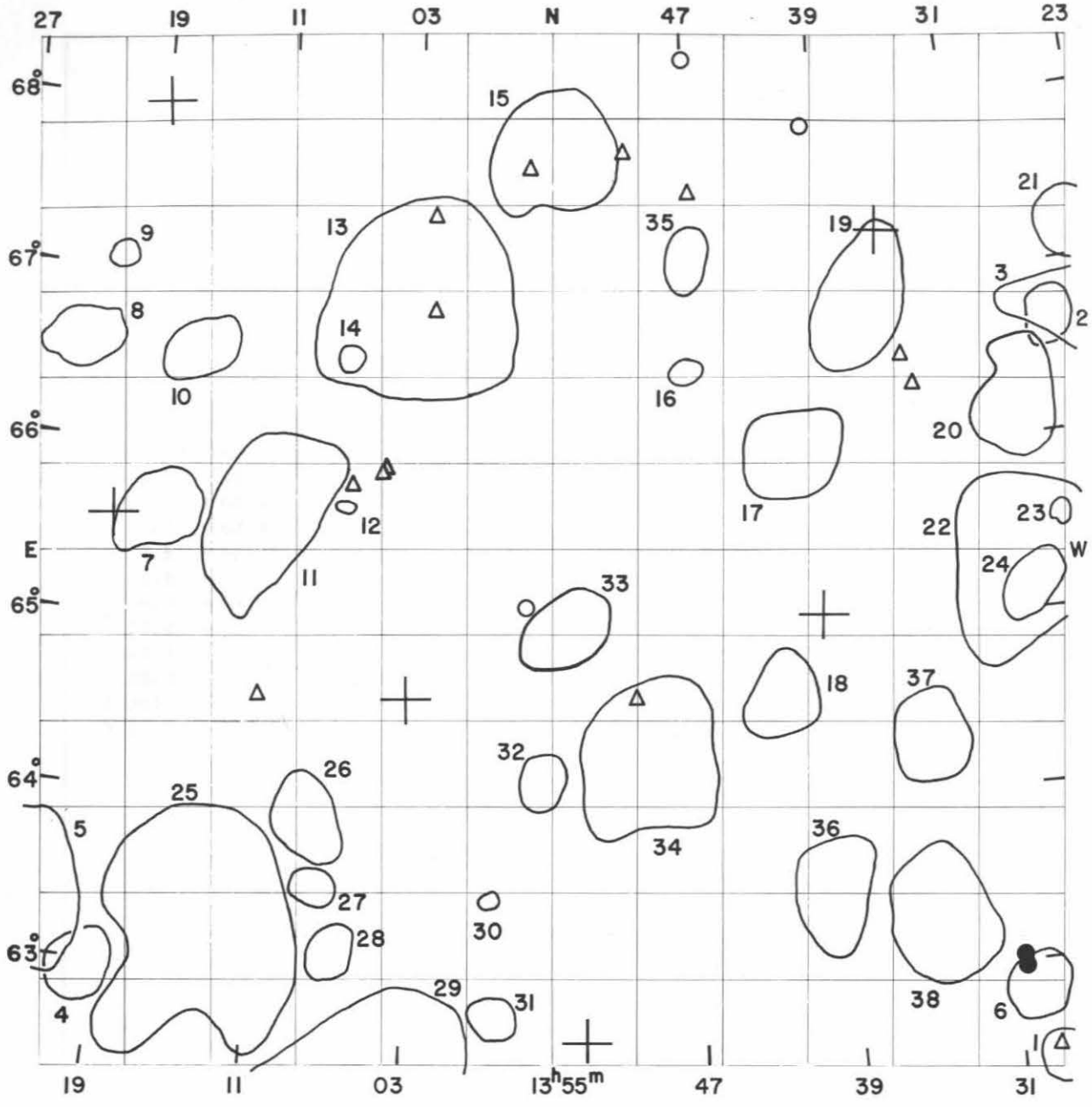
Cluster	Character	Population	Diameter in cm	Distance	Number on chart
1229.3 + 6733	compact	226	6.8	D	13
1231.9 + 6814	medium compact	67	1.4	ED	39
1234.7 + 6701	compact	52	1.0	ED	42
1235.9 + 6436	medium compact	195	2.2	VD	45
1236.2 + 6806	open	90	2.3	D	40
1237.8 + 6313	open	154	3.5	D	47
1237.8 + 6457	medium compact	79	1.6	ED	44
1238.0 + 6359	open	195	3.5	D	46
1238.2 + 6244	medium compact	104	1.3	ED	48
1238.7 + 6610	open	189	7.3	MD	18
1240.0 + 6625	medium compact	51	1.2	ED	43
1240.7 + 6728	open	104	3.1	VD	41
1241.1 + 6425	medium compact	108	2.8	VD	37
1245.2 + 6346	medium compact	102	6.3	D	32
1245.3 + 6422	compact	41	0.7	ED	31
1246.4 + 6614	medium compact	70	2.1	ED	30
1246.8 + 6448	medium compact	83	1.8	VD	33
1248.0 + 6250	medium compact	141	5.2	MD	34
1249.1 + 6726	medium compact	149	6.5	MD	17
1250.8 + 6306	compact	52	0.9	ED	35
1251.8 + 6515	compact	139	2.9	VD	29
1252.7 + 6249	medium compact	55	0.8	ED	36
1253.7 + 6559	medium compact	125	3.9	D	15
1253.9 + 6217	medium compact	94	2.3	D	49
1254.7 + 6427	medium compact	202	5.3	D	28
1256.1 + 6537	compact	99	1.6	ED	14
1257.6 + 6605	medium compact	43	1.0	ED	16
1257.8 + 6327	compact	36	0.5	ED	27
1301.9 + 6745	compact	190	2.9	VD	12
1302.2 + 6243	open	174	14.0	Near	23
1302.4 + 6235	compact	64	2.0	VD	26
1304.6 + 6411	compact	59	1.7	ED	25
1308.2 + 6656	compact	83	1.7	ED	11
1309.5 + 6403	compact	156	3.7	VD	24
1312.4 + 6451	medium compact	155	3.8	D	22
1317.7 + 6708	compact	71	1.5	VD	10
1318.3 + 6646	open	194	6.7	D	8
1319.7 + 6450	compact	128	3.2	VD	20
1320.1 + 6318	open	75	2.0	ED	21
1323.2 + 6248	medium compact	139	3.9	VD	19
1324.0 + 6714	compact	90	2.0	ED	2
1325.7 + 6643	medium compact	84	1.6	ED	9
1326.1 + 6533	medium compact	43	0.6	ED	5
1327.9 + 6615	medium compact	84	3.1	VD	3
1328.3 + 6509	medium compact	77	1.9	VD	6
1328.6 + 6224	open	70	1.9	ED	38
1328.9 + 6518	medium compact	129	4.8	MD	4
1329.8 + 6250	compact	94	2.1	VD	7
1336.7 + 6653	medium compact	94	3.7	VD	1

Average number of galaxies per cluster = 108.1

GALAXIES

Position α 1950 h m	Position δ o '	NGC IC*	m_p	V_s km/sec	Remarks
12 38.4	+ 63 37		15.4		very diffuse spiral
12 38.8	+ 63 47		14.8		diffuse spiral
12 40.5	+ 64 52		15.5		
12 44.0	+ 64 50		15.0		diffuse spiral
12 52.6	+ 62 30		15.1		compact
12 54.0	+ 63 53		14.6		
12 58.7	+ 64 44		15.6		
12 59.4	+ 65 17		15.2		double nebula, filaments
13 04.6	+ 67 58		14.1		very diffuse
13 05.9	+ 62 37		15.7		
13 06.8	+ 62 33		13.8		
13 07.0	+ 62 35		13.7		
13 13.3	+ 62 48		15.4		
13 14.8	+ 62 55		15.5		very compact
13 22.8	+ 63 21		15.1		
13 26.0	+ 63 01		14.9		
13 28.2	+ 62 46	5205	13.5		
13 29.1	+ 62 29		15.6		double system
13 30.4	+ 62 57	5216	14.0		} connected by bridge
13 30.5	+ 63 01	5218	13.1		
13 33.9	+ 66 23		15.7		





FIELD No. 317

13^h55^m $+65^o30'$

Survey Plate No. 1428

GC STARS

Nos.	R.A.	Decl.	m_p
	h m s	o ' "	
18429	13 35 33.3	+ 67 17 27	6.80
18527	13 39 56.5	+ 65 04 28	5.70
18825	13 53 11.9	+ 62 37 21	7.26
19019	14 03 02.0	+ 64 36 51	3.64
19358	14 18 55.5	+ 68 00 39	6.71
19384	14 19 59.8	+ 65 35 28	7.00

CLUSTERS OF GALAXIES

Cluster	Character	Population	Diameter in cm	Distance	Number on chart
1318.3 + 6646	open	194	6.7	D	3
1324.0 + 6714	compact	90	2.0	ED	21
1325.7 + 6643	medium compact	84	1.6	ED	2
1326.1 + 6533	medium compact	43	0.6	ED	23
1327.9 + 6615	medium compact	84	3.1	VD	20
1328.3 + 6509	medium compact	77	1.9	VD	24
1328.6 + 6224	open	70	1.9	ED	1
1328.9 + 6518	medium compact	129	4.8	MD	22
1329.8 + 6250	compact	94	2.1	VD	6
1334.4 + 6420	medium compact	84	2.8	ED	37
1334.5 + 6317	medium compact	175	3.8	D	38
1336.7 + 6653	medium compact	94	3.7	VD	19
1339.8 + 6328	medium compact	102	3.1	VD	36
1341.4 + 6601	medium compact	170	3.1	ED	17
1342.3 + 6437	medium compact	103	2.3	ED	18
1347.3 + 6709	open	60	1.6	ED	35
1347.5 + 6632	medium compact	45	0.9	ED	16
1349.6 + 6416	medium compact	132	4.9	D	34
1354.3 + 6501	open	90	2.7	VD	33
1355.2 + 6747	medium compact	119	4.0	D	15
1355.5 + 6408	compact	105	1.6	ED	32
1358.1 + 6245	compact	235	1.4	ED	31 *)
1358.3 + 6326	compact	37	0.5	ED	30
1402.9 + 6653	medium compact	144	6.3	MD	13
1405.6 + 6202	medium compact	328	8.1	D	29
1406.7 + 6307	medium compact	77	1.6	ED	28
1406.7 + 6543	medium compact	37	0.4	ED	12
1407.1 + 6635	compact	80	0.7	ED	14
1407.6 + 6329	compact	85	1.3	ED	27
1408.4 + 6352	compact	109	2.5	VD	26
1411.1 + 6538	medium compact	168	4.6	D	11
1413.2 + 6310	open	141	6.8	MD	25
1415.6 + 6537	open	94	2.7	ED	7
1415.8 + 6635	open	86	2.2	VD	10
1419.6 + 6255	open	77	2.1	VD	4
1421.0 + 6704	compact	70	0.9	ED	9
1422.9 + 6636	medium compact	99	2.2	ED	8
1424.8 + 6331	open	124	5.9	VD	5

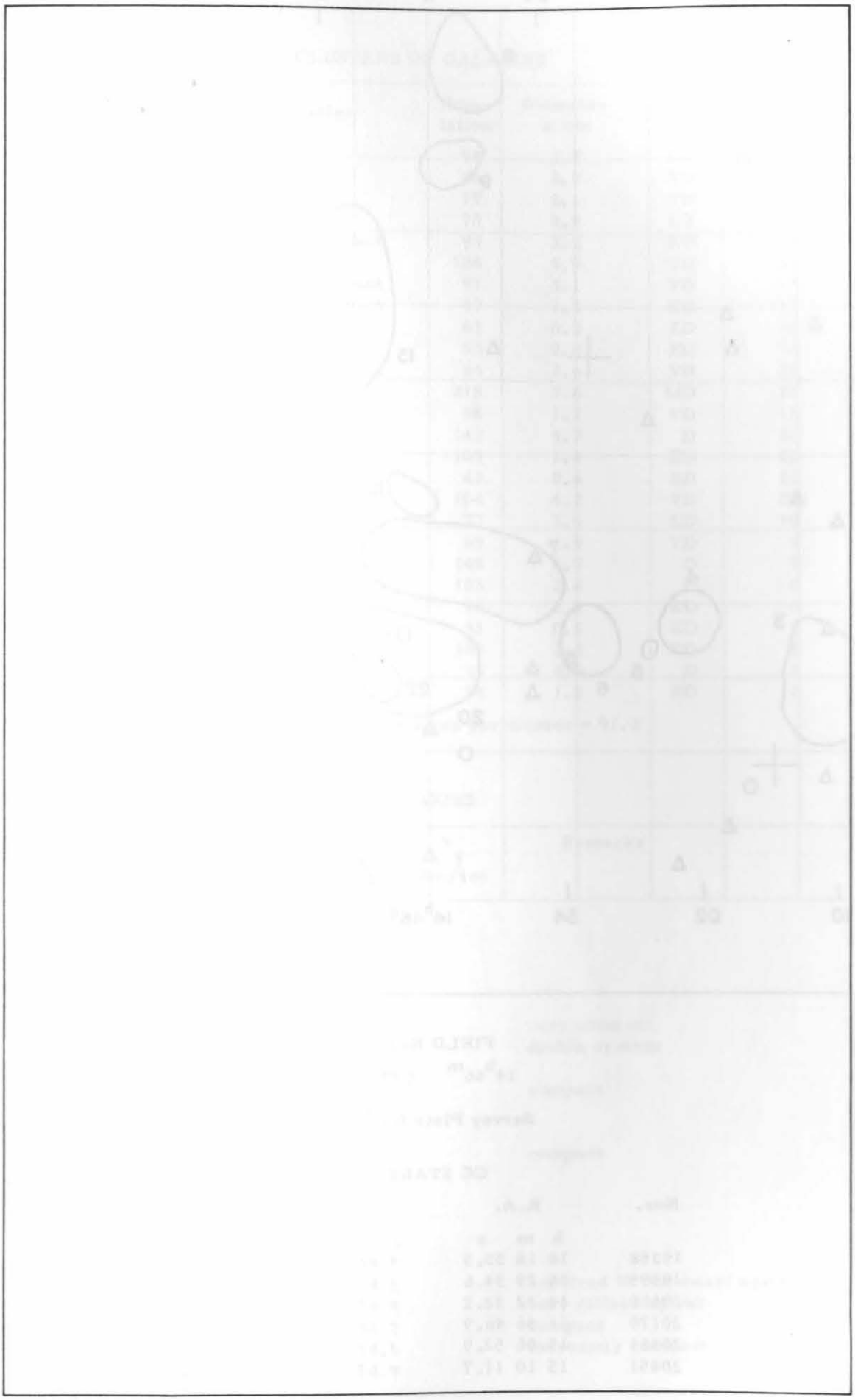
Average number of galaxies per cluster = 108.8

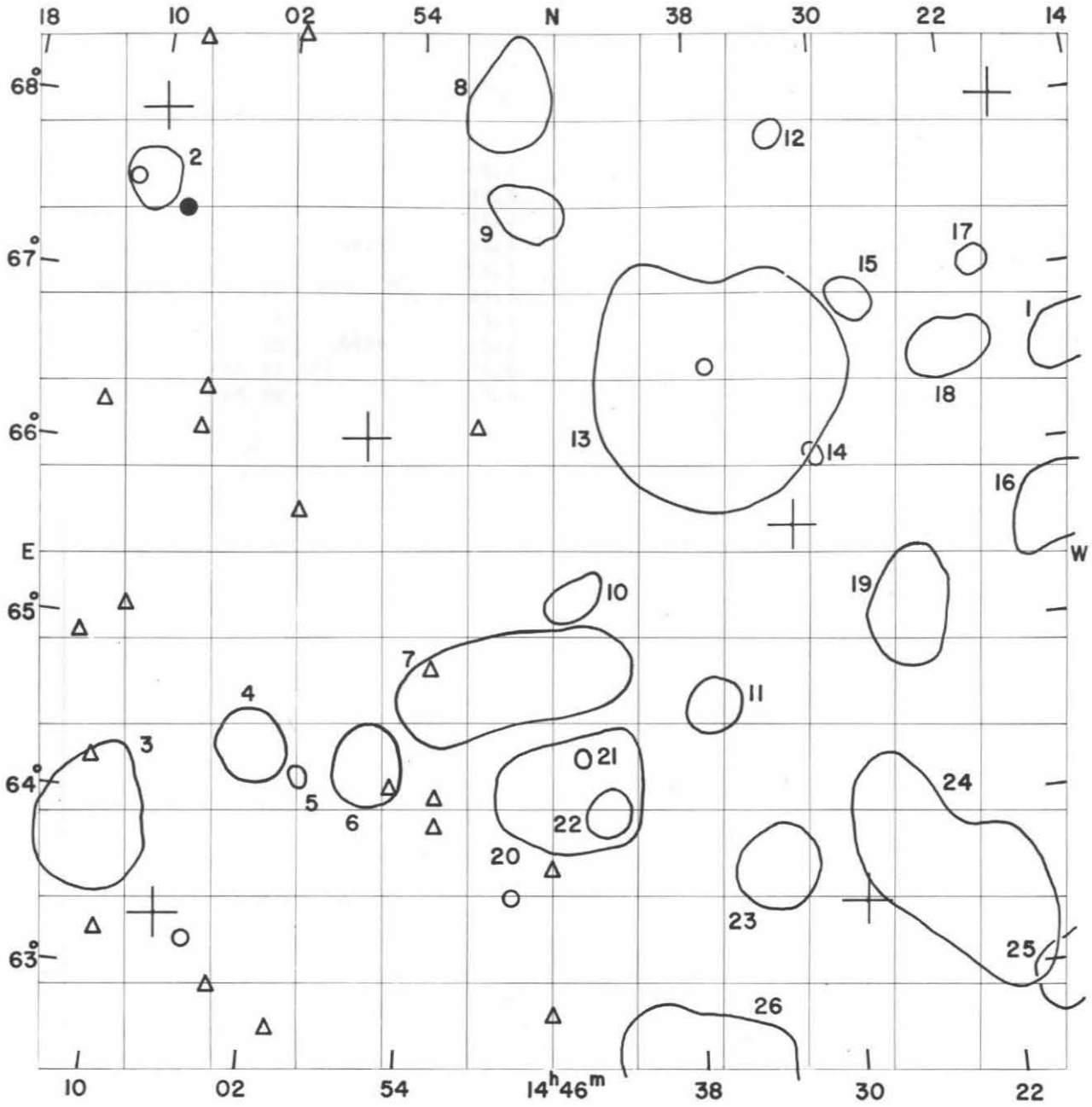
*) Very compact, rich.

GALAXIES

Position α 1950 h m	Position δ o '	NGC IC*	m_p	V_s km/sec	Remarks
13 29.1	+ 62 29		15.6		double system
13 30.4	+ 62 57	5216	14.0		connected by bridge
13 30.5	+ 63 01	5218	13.1		connected by bridge
13 33.9	+ 66 23		15.7		
13 34.5	+ 66 33		15.6		diffuse spiral
13 39.6	+ 67 55	5283	14.3		
13 46.7	+ 67 33		15.4		
13 46.9	+ 68 20		14.8		

Position α 1950 h m	Position δ o '	NGC IC*	m_p	V_s km/sec	Remarks
13 50.4	+ 64 37		15.7		
13 50.7	+ 67 48		15.5		
13 56.3	+ 67 43		15.7		
13 56.5	+ 65 10	5413	14.4		
14 02.0	+ 66 53		15.7		
14 02.0	+ 67 25		15.5		extremely compact
14 04.6	+ 65 57		15.7		double system
14 04.7	+ 65 55	5479	15.2		compact
14 06.5	+ 65 51		15.6		
14 11.1	+ 64 36		15.6		





FIELD No. 318

14^h46^m $+65^\circ30'$

Survey Plate No. 1575

GC STARS

Nos.	R.A.	Decl.	m_p
	h m s	o ' "	
19358	14 18 55.5	+ 68 00 39	6.71
19595	14 29 34.6	+ 63 24 22	6.04
19660	14 32 32.2	+ 65 36 48	6.63
20170	14 56 46.9	+ 66 07 52	4.86
20381	15 06 52.9	+ 63 18 27	6.75
20451	15 10 11.7	+ 67 58 08	6.15

CLUSTERS OF GALAXIES

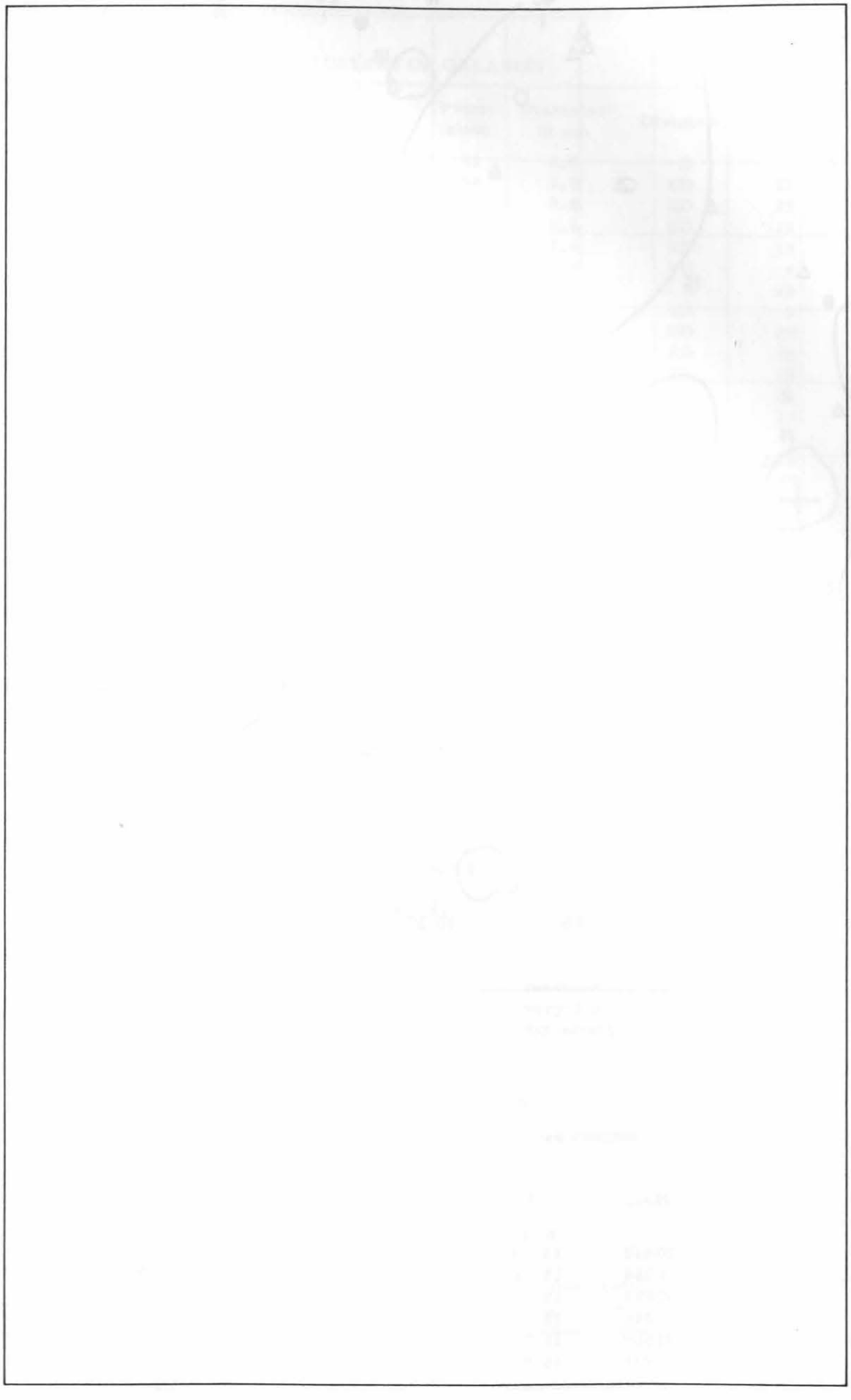
Cluster	Character	Population	Diameter in cm	Distance	Number on chart
1415.6 + 6537	open	94	2.7	ED	16
1415.8 + 6635	open	86	2.2	VD	1
1419.6 + 6255	open	77	2.1	VD	25
1421.0 + 6704	compact	70	0.9	ED	17
1422.9 + 6636	medium compact	99	2.2	ED	18
1424.8 + 6331	open	124	5.9	VD	24
1426.1 + 6505	medium compact	91	3.1	VD	19
1428.6 + 6654	medium compact	47	1.3	ED	15
1431.1 + 6601	compact	61	0.5	ED	14
1433.0 + 6752	compact	55	0.8	ED	12
1434.1 + 6338	medium compact	84	2.6	VD	23
1436.9 + 6625	open	218	7.8	MD	13
1437.3 + 6436	compact	98	1.7	VD	11
1437.4 + 6225	open	142	4.7	D	26
1443.0 + 6359	compact	109	1.4	ED	22
1444.4 + 6418	compact	43	0.4	ED	21
1444.8 + 6406	open	104	4.2	VD	20
1445.0 + 6513	open	77	1.6	ED	10
1447.6 + 6727	medium compact	69	1.9	VD	9
1448.2 + 6445	medium compact	148	4.9	D	7
1449.0 + 6806	medium compact	103	2.8	D	8
1456.0 + 6415	medium compact	76	2.2	ED	6
1459.9 + 6410	compact	53	0.5	ED	5
1502.4 + 6420	medium compact	100	2.2	ED	4
1510.6 + 6347	open	93	4.0	D	3
1510.7 + 6733	medium compact	54	1.8	ED	2

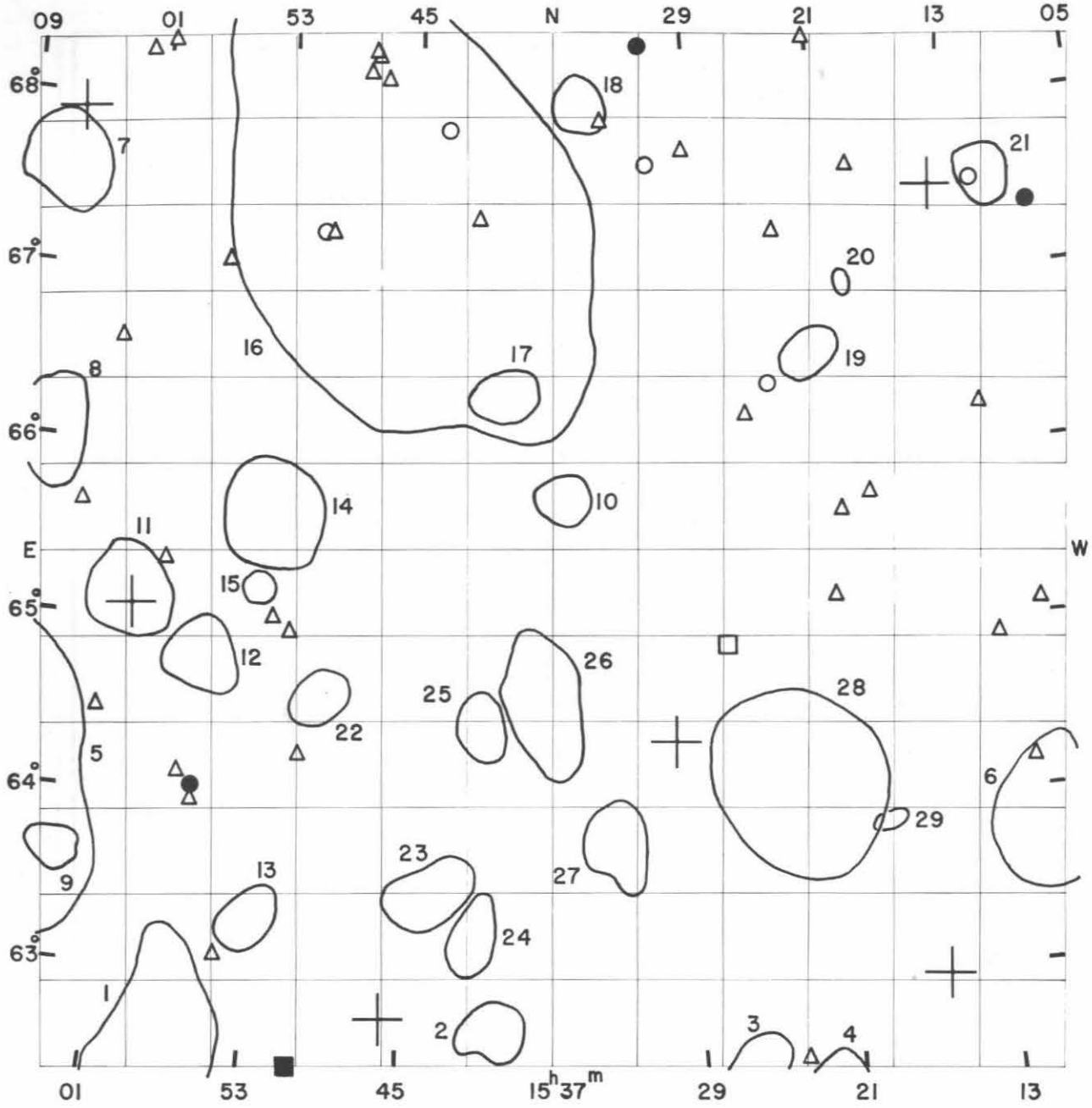
Average number of galaxies per cluster = 91.3

GALAXIES

Position α 1950 h m	Position δ o '	NGC IC*	m_p	V_s km/sec	Remarks
14 37.1	+ 66 33		14.8		
14 46.0	+ 62 48		15.7		
14 46.0	+ 63 38		15.6		
14 48.2	+ 63 29	1065*	15.0		
14 50.3	+ 66 13		15.3		
14 52.3	+ 63 53		15.5		very compact
14 52.3	+ 64 04		15.6		double system
14 52.6	+ 64 48		15.1		
14 54.7	+ 64 07	5807	15.3		compact
15 00.4	+ 65 42		15.7		
15 00.7	+ 62 42		15.6		
15 01.6	+ 68 28		15.4		compact
15 03.9	+ 62 55		15.5		
15 05.3	+ 63 12	1100*	14.1		
15 06.1	+ 66 21		15.5		
15 06.3	+ 66 07		15.4		
15 08.0	+ 68 24		15.7		
15 08.2	+ 67 23		13.6		resolved U. mi dwarf system
15 09.8	+ 65 05		15.7		very diffuse spiral
15 10.0	+ 63 13		15.7		compact
15 11.0	+ 64 10		15.6		extremely compact
15 11.5	+ 67 33	1110*	14.9		

Position α 1950 h m	Position δ o '	NGC IC*	m_p	V_s km/sec	Remarks
15 12.2	+ 64 54		15.4		
15 12.2	+ 66 15		15.6		





FIELD No. 319

15^h37^m $+65^o30'$

Survey Plate No. 1426

GC STARS

Nos.	R.A.	Decl.	m_p
	h m s	o ' "	
20532	15 14 03.3	+ 67 32 11	5.23
20584	15 16 22.7	+ 62 57 10	6.77
20894	15 30 13.2	+ 64 22 35	5.88
21246	15 45 53.9	+ 62 45 13	5.13
21560	16 00 28.3	+ 65 05 18	7.10
21705	16 06 10.7	+ 67 56 30	5.40

CLUSTERS OF GALAXIES

Cluster	Character	Population	Diameter in cm	Distance	Number on chart
1510.6 + 6347	open	93	4.0	D	6
1510.7 + 6733	medium compact	54	1.8	ED	21
1519.0 + 6351	compact	35	0.8	ED	29
1519.8 + 6700	compact	45	0.6	ED	20
1522.1 + 6635	medium compact	56	1.6	VD	19
1523.5 + 6211	medium compact	106	2.9	VD	4
1523.7 + 6405	open	155	5.7	D	28
1526.5 + 6228	medium compact	68	1.9	VD	3
1533.5 + 6347	open	76	2.3	ED	27
1535.4 + 6803	medium compact	76	1.7	ED	18
1536.4 + 6546	medium compact	60	1.6	ED	10
1537.3 + 6435	open	100	3.4	D	26
1539.6 + 6623	medium compact	184	1.9	ED	17
1540.0 + 6240	open	89	2.1	VD	2
1540.9 + 6427	medium compact	75	1.7	ED	25
1541.1 + 6313	open	74	1.9	VD	24
1543.6 + 6328	medium compact	61	2.4	ED	23
1546.0 + 6722	open	169	12.9	Near	16
1549.8 + 6436	open	56	1.7	VD	22
1553.0 + 6538	medium compact	96	3.4	D	14
1553.1 + 6316	open	84	1.9	ED	13
1553.5 + 6513	compact	79	1.0	ED	15
1556.5 + 6446	open	80	2.3	VD	12
1557.4 + 6235	open	111	4.5	D	1
1600.8 + 6508	compact	125	2.8	D	11
1603.5 + 6337	open	63	1.5	ED	9
1606.1 + 6602	medium compact	105	2.8	VD	8
1607.0 + 6736	open	80	2.9	VD	7
1609.0 + 6411	open	167	10.3	Near	5

Average number of galaxies per cluster = 90.4

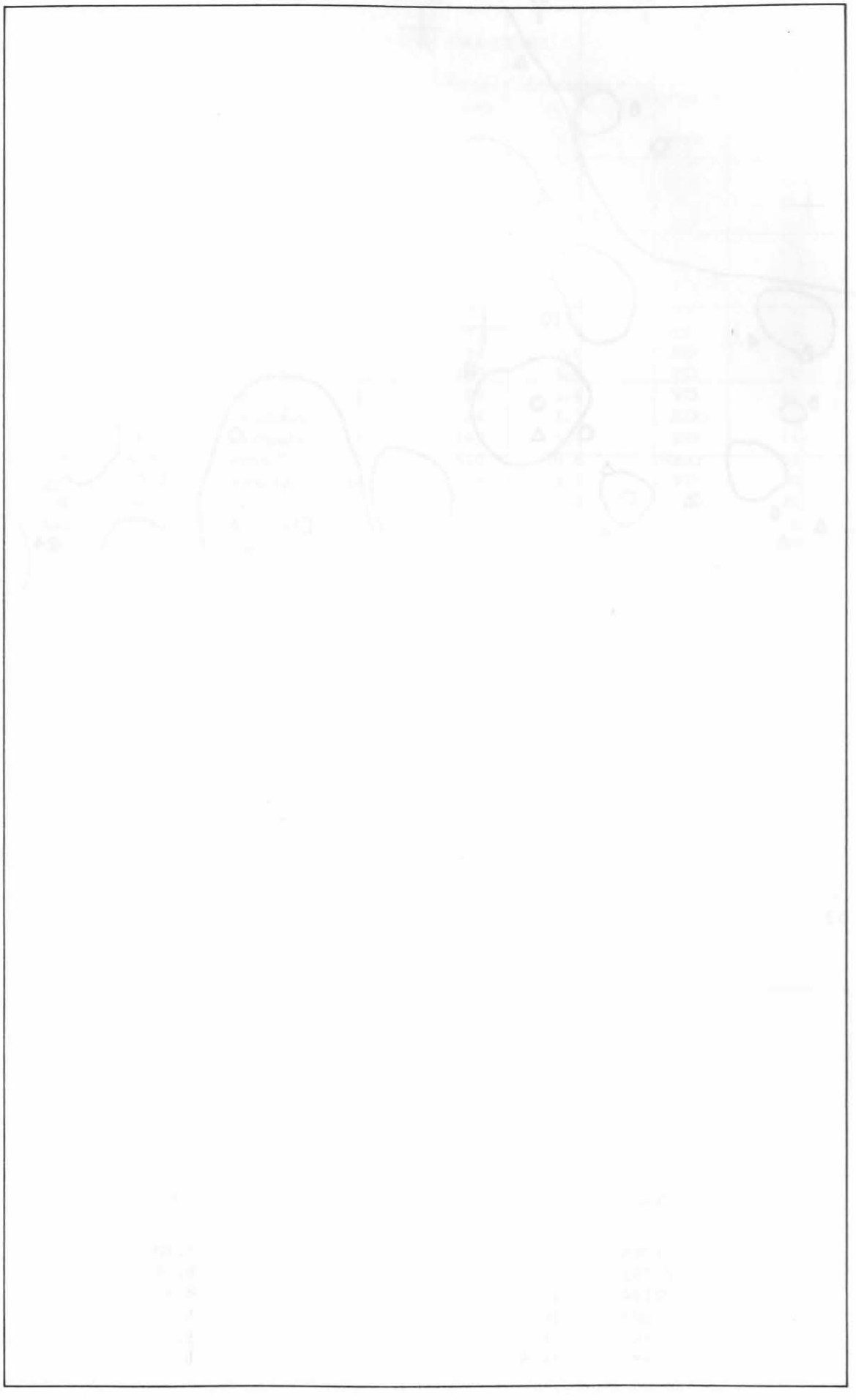
GALAXIES

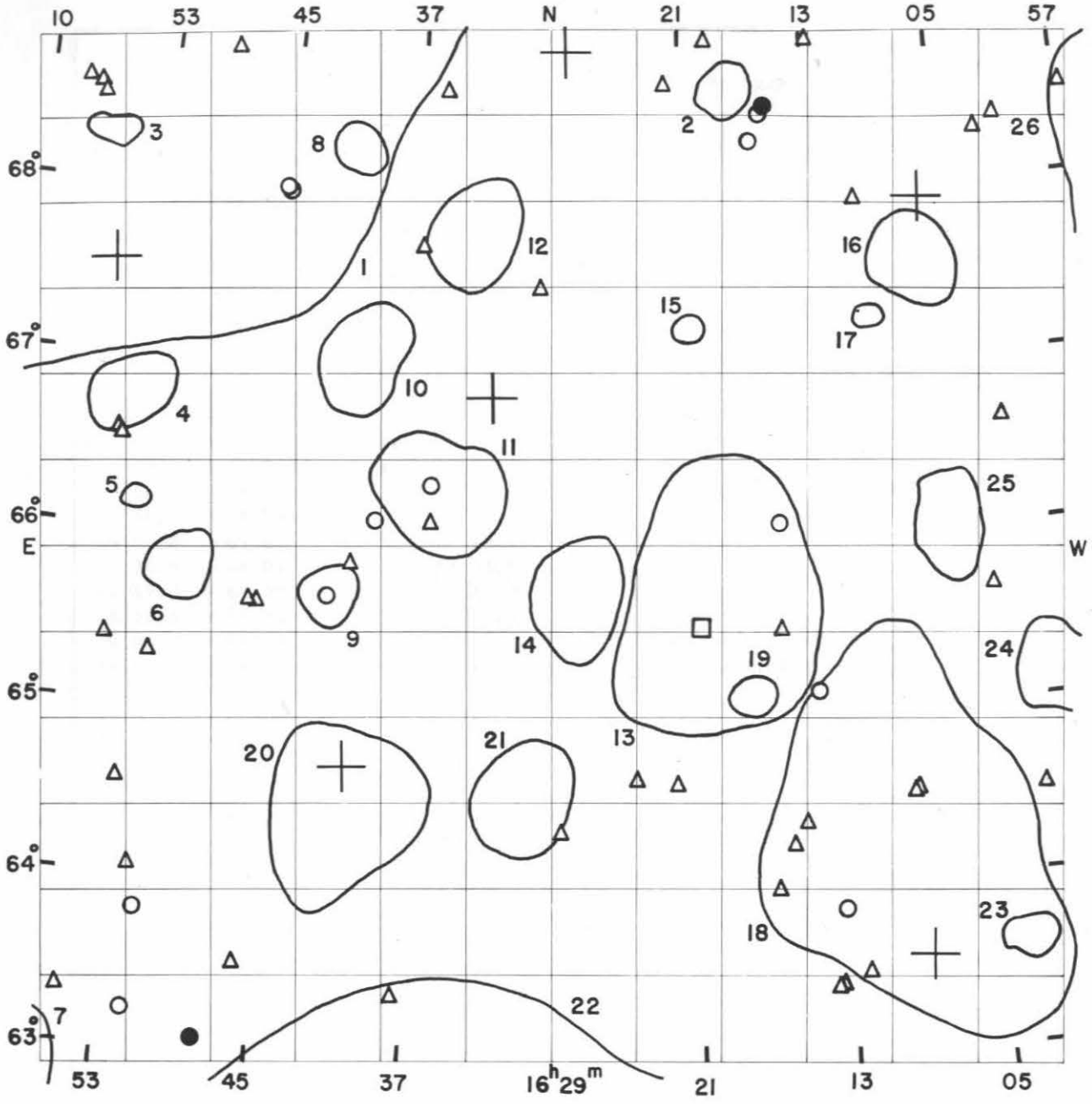
Position α 1950 h m	Position δ o ′	NGC IC*	m_p	V_s km/sec	Remarks
15 08.2	+ 67 23		13.6		resolved U. mi dwarf system
15 09.8	+ 65 05		15.7		very diffuse spiral
15 11.0	+ 64 10		15.6		extremely compact
15 11.5	+ 67 33	1110*	14.9		
15 12.2	+ 64 54		15.4		
15 12.2	+ 66 15		15.6		
15 18.9	+ 65 46		15.7		
15 19.1	+ 67 41		15.1		very compact
15 20.5	+ 65 42		15.6		
15 21.1	+ 65 11		15.6		
15 21.2	+ 68 28		15.7		
15 23.7	+ 67 20		15.3		
15 23.8	+ 62 31		15.7		
15 24.5	+ 66 25		15.0		
15 25.8	+ 66 15		15.4		double system, faint jet
15 27.4	+ 64 55	5949	12.7	+ 380	m_H = 12.9 S
15 29.0	+ 67 48		15.5		double system
15 31.4	+ 67 44		14.4		
15 31.7	+ 68 25	1129*	13.7		

Position α 1950 h m	Position δ o '	NGC IC*	m_p	V_s km/sec	Remarks
15 34.2	+ 67 59		15.5		
15 41.4	+ 67 25		15.7		very diffuse
15 43.4	+ 67 55		15.0		
15 47.3	+ 68 13		15.6		
15 48.0	+ 68 21		15.2		
15 48.2	+ 68 22		15.3		
15 48.4	+ 68 15		15.2		
15 50.3	+ 67 20		15.3		
15 50.6	+ 62 27	6015	11.7	+ 689	m_H = 12.1 Sc
15 50.8	+ 67 19		14.6		double system
15 50.9	+ 64 17		15.4		
15 51.7	+ 64 59	6019	15.7		
15 52.6	+ 65 04	6024	15.1		
15 54.6	+ 63 05		15.7		faint jet
15 56.4	+ 63 59		15.3		
15 56.4	+ 67 07		15.6		compact
15 56.5	+ 64 04		13.9		
15 57.2	+ 64 09		15.5		
15 58.8	+ 65 23		15.3		quadruple system
16 01.1	+ 68 24		15.5		extremely compact
16 01.9	+ 64 29		15.5		double system
16 02.5	+ 66 37		15.4		
16 02.5	+ 68 20		15.6		
16 03.9	+ 65 40		15.2		compact

MAGNITUDES AND TYPES FROM OTHER SOURCES

NGC IC*	Bigay 1951		Pettit 1954		Humason, Mayall, Sandage 1956		Holmberg 1958	
5949	-	-	-	-	-	Sc	-	-
6015	-	-	11.65	Sc	11.6	Sc	11.69	Sc+





FIELD No. 320

16^h29^m $+66^\circ00'$

Survey Plate No. 1410

GC STARS

Nos.	R.A.	Decl.	m_p
	h m s	o ' "	
21705	16 06 10.7	+ 67 56 30	5.40
21763	16 08 48.3	+ 63 32 14	6.71
22194	16 28 04.2	+ 68 52 35	4.98
22297	16 32 31.3	+ 66 51 28	Var.
22489	16 40 34.0	+ 64 41 01	5.00
22872	16 55 47.7	+ 67 33 19	6.72

CLUSTERS OF GALAXIES

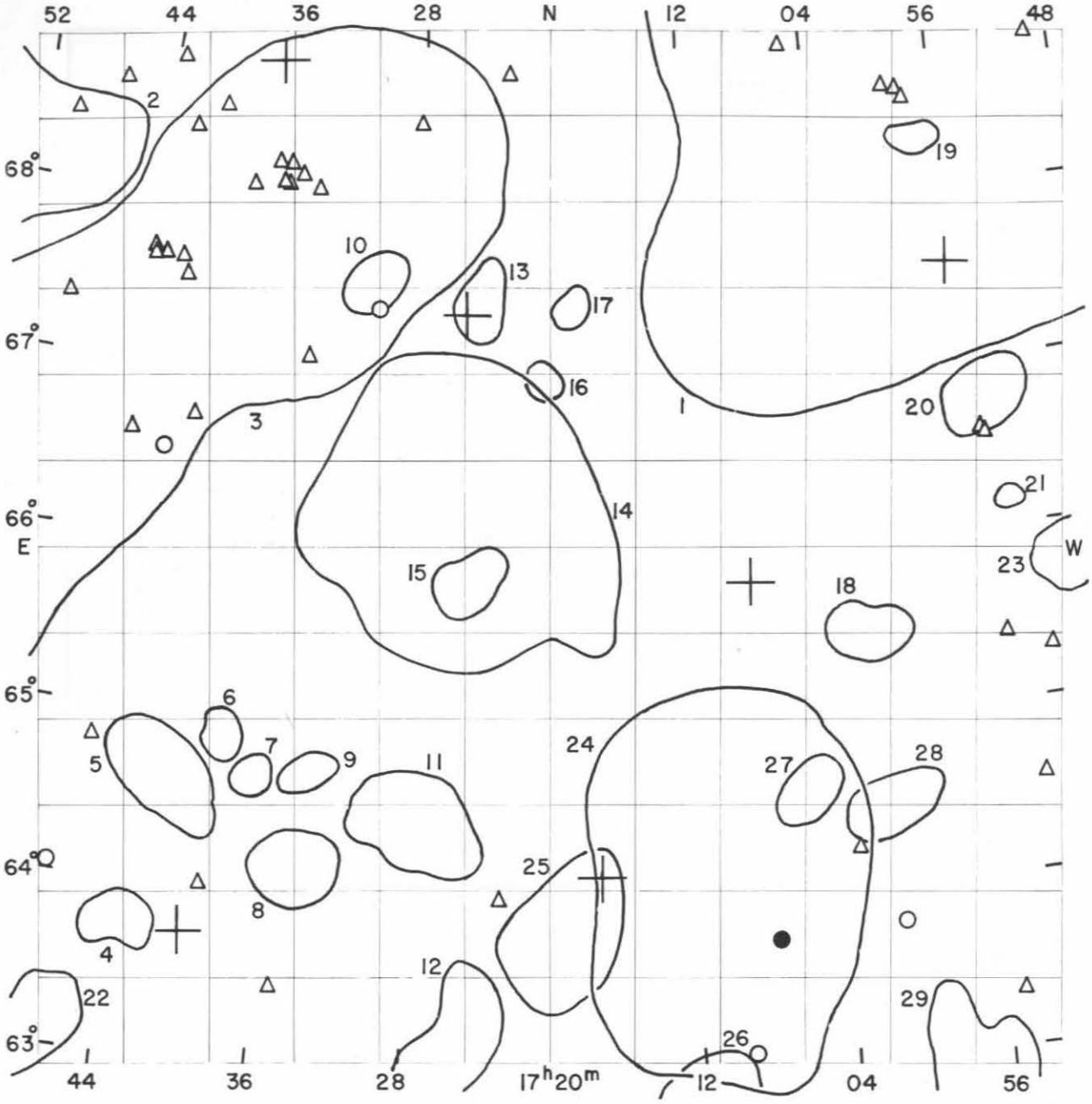
Cluster	Character	Population	Diameter in cm	Distance	Number on chart
1546.0 + 6722	open	169	12.9	Near	26
1600.8 + 6508	compact	125	2.8	D	24
1603.5 + 6337	open	63	1.5	ED	23
1606.1 + 6602	medium compact	105	2.8	VD	25
1607.0 + 6736	open	80	2.9	VD	16
1609.0 + 6411	open	167	10.3	Near	18
1609.8 + 6717	compact	51	0.8	ED	17
1617.7 + 6507	compact	64	1.3	VD	19
1618.2 + 6839	medium compact	98	1.7	VD	2
1619.3 + 6538	open	167	7.5	MD	13
1620.9 + 6715	open	54	1.0	ED	15
1627.5 + 6543	compact	140	3.4	VD	14
1630.8 + 6430	open	89	3.4	VD	21
1633.6 + 6748	compact	84	3.2	ED	12
1635.4 + 6618	compact	167	3.8	VD	11
1638.4 + 6038	open	510	30.6	Near	22
1640.3 + 6704	medium compact	69	3.1	VD	10
1640.7 + 6426	open	121	5.2	D	20
1641.2 + 6817	medium compact	63	1.6	VD	8
1641.7 + 6541	medium compact	88	1.9	VD	9
1650.5 + 6547	medium compact	90	2.1	ED	6
1653.4 + 6610	medium compact	51	0.8	ED	5
1654.5 + 6646	medium compact	242	2.6	ED	4
1655.8 + 6844	open	292	20.3	Near	1
1657.1 + 6817	medium compact	55	1.3	ED	3
1657.9 + 6248	medium compact	123	4.0	D	7

Average number of galaxies per cluster = 128.0

GALAXIES

Position α 1950 h m	Position δ o ′	NGC IC*	m_p	V_s km/sec	Remarks
15 56.7	+ 68 32		15.6		
16 01.1	+ 68 24		15.5		extremely compact
16 01.9	+ 64 29		15.5		double system
16 02.5	+ 66 37		15.4		
16 02.5	+ 68 20		15.6		
16 03.9	+ 65 40		15.2		compact
16 08.9	+ 64 31		15.7		
16 09.0	+ 64 30		15.6		compact
16 10.4	+ 67 58		15.1		
16 12.2	+ 63 28		15.6		compact
16 12.7	+ 68 55		15.6		
16 13.2	+ 63 50		14.5		
16 13.6	+ 63 23		15.7		diffuse
16 13.8	+ 63 23		15.2		double nebula
16 14.0	+ 65 07		14.8		
16 15.0	+ 64 21	1212*	15.2		
16 15.6	+ 68 32	1215*	14.0		
16 15.8	+ 64 13		15.5		
16 15.9	+ 66 05	1214*	15.0		
16 16.0	+ 65 28		15.3		compact
16 16.0	+ 68 29	1216*	14.9		
16 16.6	+ 68 20	1218*	14.6		

Position α 1950 h m	Position δ o '	NGC IC*	m_p	V_s km/sec	Remarks
16 16.7	+ 63 58		15.4		
16 19.3	+ 68 56		15.7		
16 20.6	+ 65 30	6140	12.6		
16 22.0	+ 68 40		15.7		
16 22.1	+ 64 35		15.5		
16 24.3	+ 64 37		15.3		
16 28.5	+ 64 19		15.4		
16 29.7	+ 67 30		15.4		
16 35.6	+ 68 37		15.7		
16 36.0	+ 66 07		15.2		
16 36.1	+ 66 20		14.7		
16 36.9	+ 67 44	1225*	15.5		
16 37.5	+ 63 22		15.1		
16 39.3	+ 66 07	6214	14.3		
16 40.7	+ 65 52		15.7		
16 41.8	+ 65 40	1228*	14.5		
16 45.3	+ 68 01		15.0		
16 45.4	+ 68 02		14.9		
16 45.9	+ 65 37		15.7		
16 46.0	+ 63 30		15.6		
16 46.3	+ 65 38		15.3		very compact
16 47.8	+ 63 04	6247	13.5		
16 49.3	+ 68 50		15.4		
16 51.4	+ 63 47	6260	14.8		
16 51.6	+ 63 12	1235*	14.9		
16 51.6	+ 65 17		15.4		
16 51.9	+ 64 01		15.7		
16 52.8	+ 64 33		15.6		compact
16 54.2	+ 65 22		15.7		extremely diffuse spiral
16 54.4	+ 66 33		15.6		
16 54.5	+ 66 34		15.3		
16 55.0	+ 63 20	6275	15.1		
16 57.7	+ 68 31	6288	15.3		
16 58.0	+ 68 35	6289	15.5		
16 58.8	+ 68 37		15.7		extremely compact



FIELD No. 321

17^h20^m $+66^\circ00'$

Survey Plate No. 745

GC STARS

Nos.	R.A.	Decl.	m_p
	h m s	o ' "	
22872	16 55 47.7	+ 67 33 19	6.72
23182	17 08 38.2	+ 65 46 34	3.22
23411	17 17 18.9	+ 64 05 02	7.18
23651	17 25 09.0	+ 67 20 55	6.31
23944	17 37 14.4	+ 68 46 52	4.87
24017	17 39 58.9	+ 63 41 50	7.1

CLUSTERS OF GALAXIES

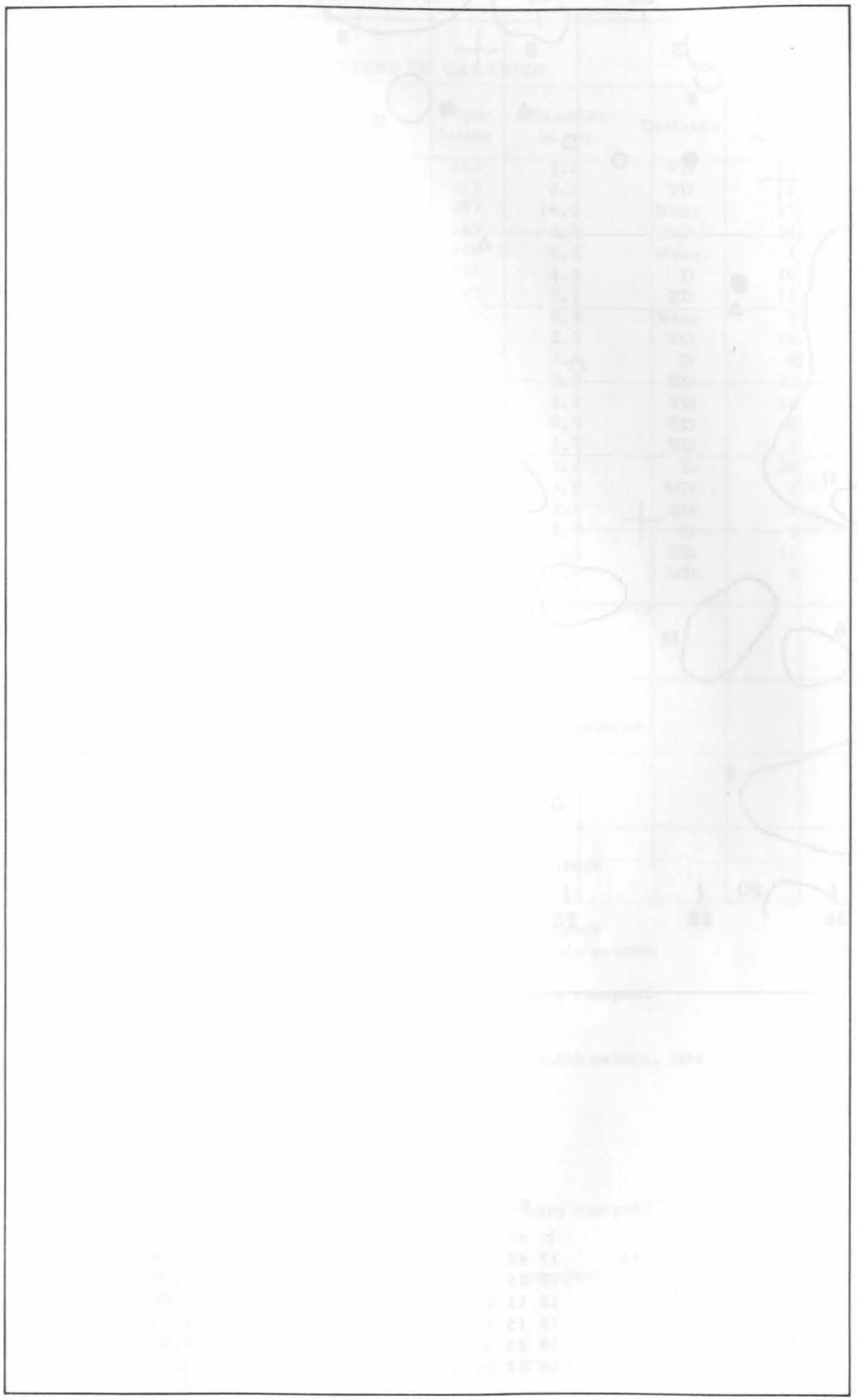
Cluster	Character	Population	Diameter in cm	Distance	Number on chart
1650.5 + 6547	medium compact	90	2.1	ED	23
1653.4 + 6610	medium compact	51	0.8	ED	21
1654.5 + 6646	medium compact	242	2.6	ED	20
1655.8 + 6844	open	292	20.3	Near	1
1657.1 + 6817	medium compact	55	1.3	ED	19
1657.9 + 6248	medium compact	123	4.0	D	29
1701.5 + 6427	medium compact	86	2.6	VD	28
1702.1 + 6528	compact	123	2.2	ED	18
1705.8 + 6434	medium compact	59	2.1	VD	27
1710.4 + 6401	compact	345	10.8	MD	24
1711.6 + 6245	open	141	3.4	D	26
1718.9 + 6724	compact	66	1.1	ED	17
1719.4 + 6343	open	109	4.2	D	25
1720.4 + 6700	compact	62	1.1	ED	16
1724.3 + 6725	medium compact	108	1.9	ED	13
1724.9 + 6547	medium compact	66	2.1	ED	15
1725.0 + 6310	medium compact	181	3.4	ED	12
1725.4 + 6611	open	131	9.7	MD	14
1727.7 + 6424	medium compact	186	3.7	VD	11
1730.8 + 6733	medium compact	99	2.0	ED	10
1733.6 + 6440	compact	82	1.4	ED	9
1733.9 + 6407	compact	128	2.6	VD	8
1736.4 + 6439	compact	81	1.3	VD	7
1738.3 + 6452	medium compact	80	1.5	ED	6
1741.2 + 6438	medium compact	162	3.2	VD	5
1743.1 + 6344	compact	137	2.1	VD	4
1745.6 + 6703	medium compact	297	16.0	Near	3
1754.5 + 6807	medium compact	169	6.7	MD	2
1754.9 + 6230	medium compact	140	8.5	Near	22

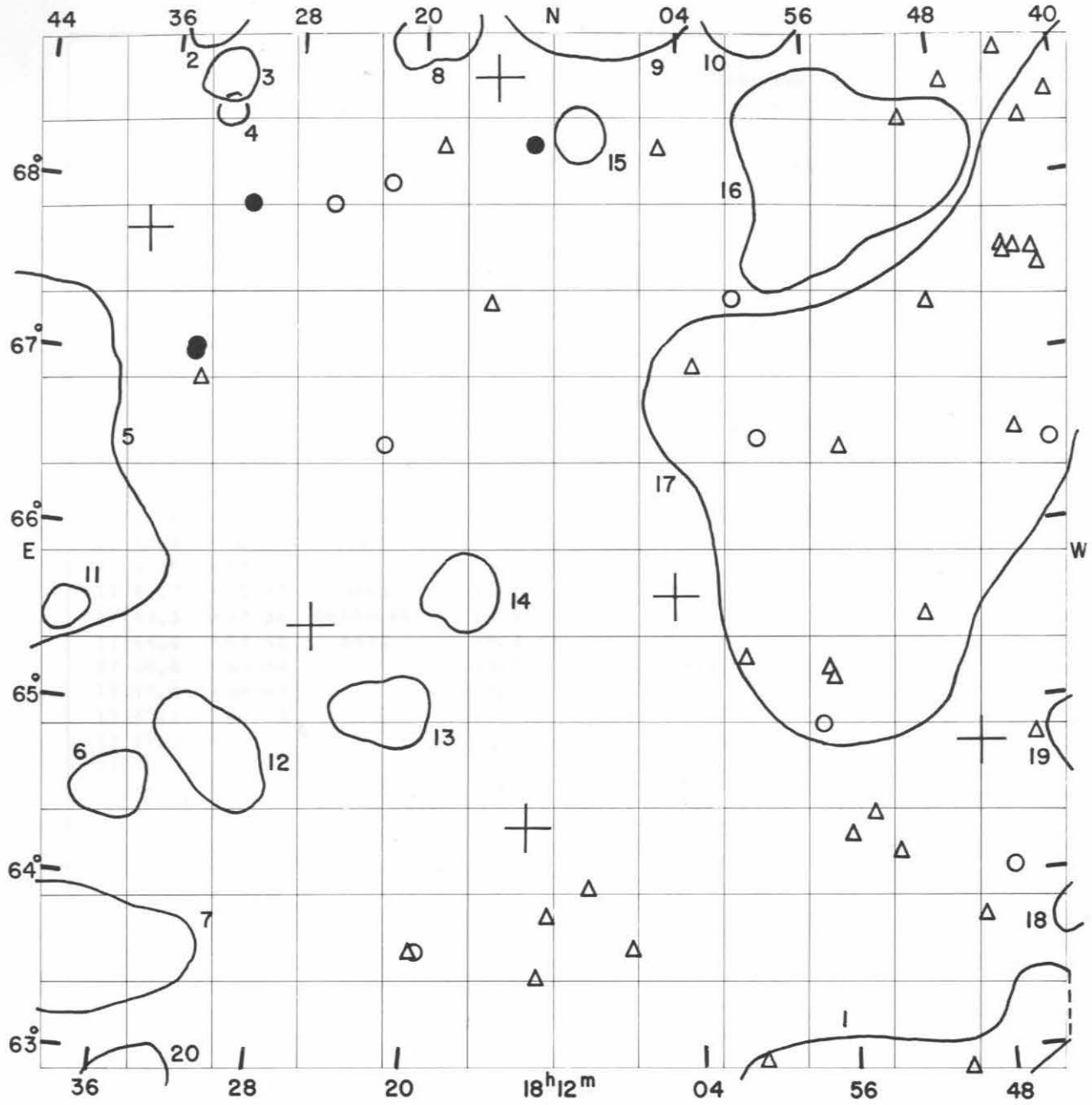
Average number of galaxies per cluster = 134.2

GALAXIES

Position α 1950 h m	Position δ o '	NGC IC*	m_p	V_s km/sec	Remarks
16 49.3	+ 68 50		15.4		
16 51.6	+ 65 17		15.4		
16 52.8	+ 64 33		15.6		compact
16 54.2	+ 65 22		15.7		extremely diffuse spiral
16 54.4	+ 66 33		15.6		
16 54.5	+ 66 34		15.3		
16 55.0	+ 63 20	6275	15.1		
16 57.7	+ 68 31	6288	15.3		
16 58.0	+ 68 35	6289	15.5		
16 58.8	+ 68 37		15.7		extremely compact
17 01.0	+ 63 46	1241*	14.2		
17 03.2	+ 64 13		15.2		
17 05.3	+ 68 53	6303	15.1		
17 07.7	+ 63 43		13.1		double system, loop
17 09.2	+ 63 03	6319	14.4		
17 22.7	+ 68 44		15.6		system with jet
17 22.8	+ 63 58		15.5		
17 28.0	+ 68 26		15.5		
17 30.4	+ 67 22		15.0		

Position α 1950 h m	Position δ o '	NGC IC*	m_p	V_s km/sec	Remarks
17 34.6	+ 67 04		15.6		double system
17 34.6	+ 68 02		15.6		
17 34.8	+ 63 26		15.4		
17 35.5	+ 68 07		15.5		
17 36.1	+ 68 10	6419	15.5		
17 36.3	+ 68 03	6420	15.5		
17 36.5	+ 68 04	6422	15.1		
17 36.9	+ 68 11	6423	15.6		compact
17 38.6	+ 68 03		15.7		
17 38.9	+ 63 59		15.3		
17 40.6	+ 68 29		15.6		
17 41.2	+ 66 42		15.3		
17 42.3	+ 67 30		15.4		
17 42.4	+ 68 22		15.3		
17 42.6	+ 67 36	6456	15.7		compact
17 42.8	+ 66 30	6457	14.7		
17 43.5	+ 68 46		15.4		
17 43.7	+ 67 37	6463	15.2		compact
17 44.3	+ 67 36	6470+6471	15.4		double system
17 44.4	+ 67 38	6472	15.2		
17 44.8	+ 66 34		15.7		very compact
17 45.4	+ 64 47		15.7		
17 47.1	+ 64 02		14.8		
17 47.3	+ 68 38		15.5		double nebula, jets
17 49.4	+ 67 21		15.7		
17 50.1	+ 68 25		15.2		





FIELD No. 322

18^h12^m $+66^\circ00'$

Survey Plate No. 550

GC STARS

Nos.	R.A.	Decl.	m_p
	h m s	° ′ ″	
24242	17 48 28.3	+ 64 46 49	7.55
24702	18 05 09.2	+ 65 43 01	7.70
24916	18 13 36.5	+ 64 22 48	5.03
24975	18 15 34.5	+ 68 44 16	6.11
25212	18 25 50.5	+ 65 31 57	4.99
25517	18 37 03.9	+ 67 45 34	7.36

CLUSTERS OF GALAXIES

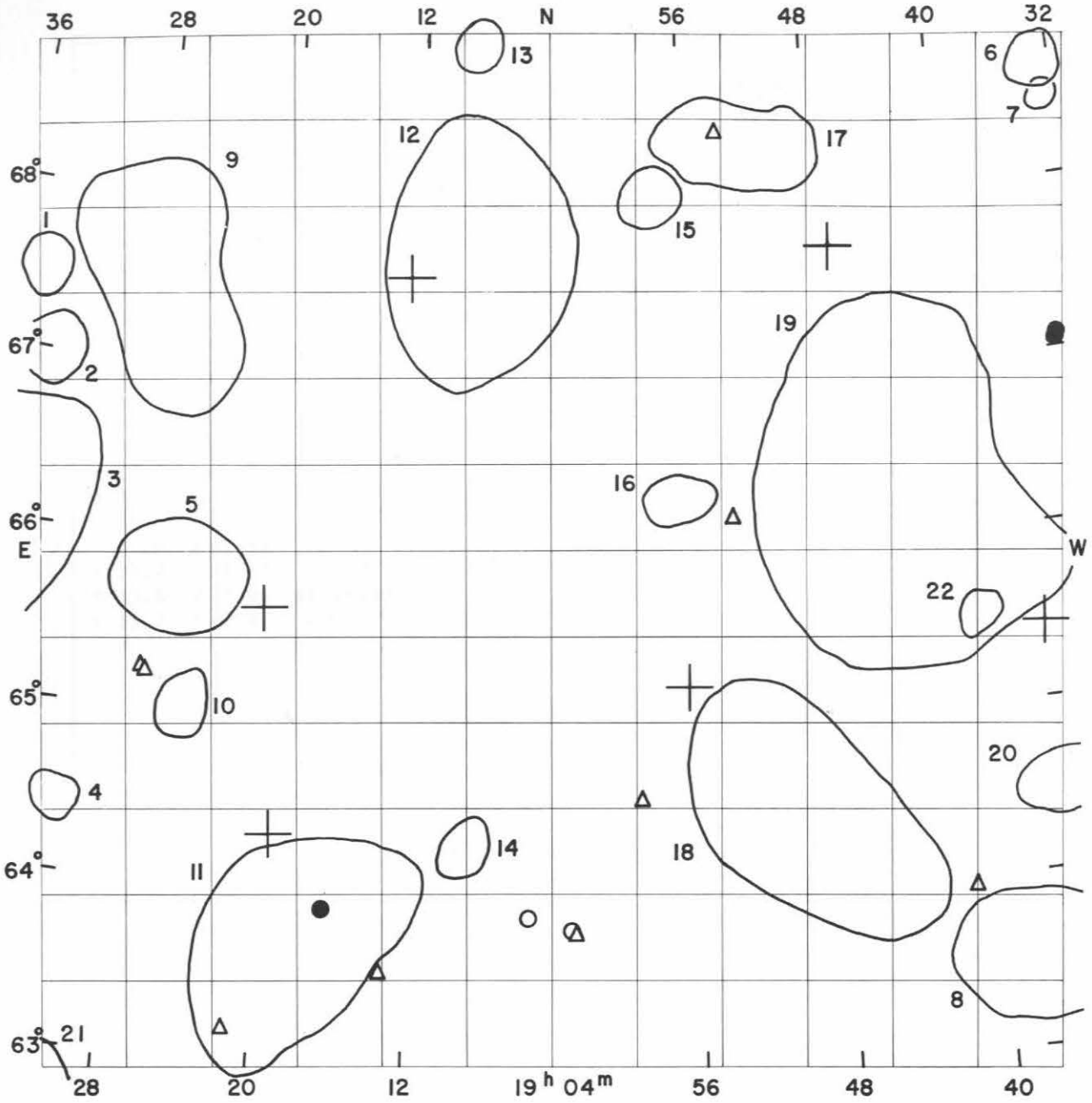
Cluster	Character	Population	Diameter in cm	Distance	Number on chart
1741.2 + 6438	medium compact	162	3.2	VD	19
1743.1 + 6344	compact	137	2.1	VD	18
1745.6 + 6703	medium compact	297	16.0	Near	17
1754.5 + 6807	medium compact	169	6.7	MD	16
1754.9 + 6230	medium compact	140	8.5	Near	1
1758.7 + 6920	medium compact	135	4.3	D	10
1810.4 + 6824	medium compact	87	1.7	ED	15
1811.4 + 6941	medium compact	229	8.9	Near	9
1817.3 + 6544	open	93	2.2	VD	14
1819.6 + 6901	medium compact	88	2.4	D	8
1821.6 + 6501	medium compact	157	2.6	ED	13
1830.9 + 6444	medium compact	188	3.2	VD	12
1832.8 + 6827	medium compact	44	0.9	ED	4
1833.1 + 6840	compact	78	1.7	VD	3
1834.0 + 6241	medium compact	102	3.2	D	20
1834.6 + 6925	medium compact	114	3.8	MD	2
1836.4 + 6430	compact	77	2.1	ED	6
1837.4 + 6333	medium compact	144	5.3	D	7
1839.6 + 6530	open	67	1.3	ED	11
1844.0 + 6613	open	162	10.5	MD	5

Average number of galaxies per cluster = 133.5

GALAXIES

Position α 1950 h m	Position δ 1950 o ′	NGC IC*	m_p	V_s km/sec	Remarks
17 40.6	+ 68 29		15.6		
17 42.3	+ 67 30		15.4		
17 42.4	+ 68 22		15.3		
17 42.6	+ 67 36	6456	15.7		compact
17 42.8	+ 66 30	6457	14.7		
17 43.5	+ 68 46		15.4		
17 43.7	+ 67 37	6463	15.2		compact
17 44.3	+ 67 36	6470+6471	15.4		double system
17 44.4	+ 67 38	6472	15.2		
17 44.8	+ 66 34		15.7		very compact
17 45.4	+ 64 47		15.7		
17 47.1	+ 64 02		14.8		
17 47.3	+ 68 38		15.5		double nebula, jets
17 48.9	+ 63 46		15.5		
17 49.4	+ 67 21		15.7		
17 50.1	+ 68 25		15.2		
17 50.3	+ 62 53		15.5		
17 51.1	+ 65 33	6505	15.4		
17 53.2	+ 64 11		15.4		
17 54.6	+ 64 25		15.7		very compact
17 55.4	+ 66 33		15.4		
17 55.8	+ 64 19	6534	15.5		
17 56.3	+ 65 13		15.6		compact
17 56.6	+ 65 16		15.6		
17 57.1	+ 64 56	6536	14.3		
18 00.1	+ 66 36	6552	14.6		
18 00.9	+ 63 01		15.7		peculiar jet
18 01.3	+ 67 25		15.0		

Position α 1950 h m	Position δ o '	NGC IC*	m_p	V_s km/sec	Remarks
18 01.4	+ 65 21		15.6		double system
18 03.8	+ 67 02		15.3		
18 05.5	+ 68 19		15.6		
18 07.9	+ 63 41		15.5		
18 10.2	+ 64 02		15.1		
18 12.4	+ 63 53		15.5		extremely compact
18 13.0	+ 63 30		15.7		
18 13.2	+ 68 20	6621+6622	13.6		double system, bridge + loop
18 15.8	+ 67 25		15.6		very compact
18 18.9	+ 68 19		15.1		diffuse spiral
18 19.4	+ 63 40		15.0		
18 19.7	+ 63 40		15.7		
18 22.0	+ 66 36	6636	14.2		interacting double system
18 22.1	+ 68 05		14.9		
18 25.6	+ 67 58	6650	14.8		compact
18 30.8	+ 67 56	6667	13.7		
18 33.2	+ 66 55	6676	15.3		
18 33.6	+ 67 06	6677+6679	13.6		double system, bridge
18 33.7	+ 67 04	4763*	13.9		



FIELD No. 323

19^h04^m $+66^\circ00'$

Survey Plate No. 1090

GC STARS

Nos.	R.A.	Decl.	m_p
	h m s	° ′ ″	
25491	18 36 03.9	+ 65 26 38	6.00
25793	18 46 52.0	+ 67 42 52	7.00
26055	18 56 12.4	+ 65 11 27	5.78
26520	19 12 32.9	+ 67 34 25	3.24
26709	19 19 23.2	+ 64 17 45	6.33
26735	19 20 24.9	+ 65 37 05	4.63

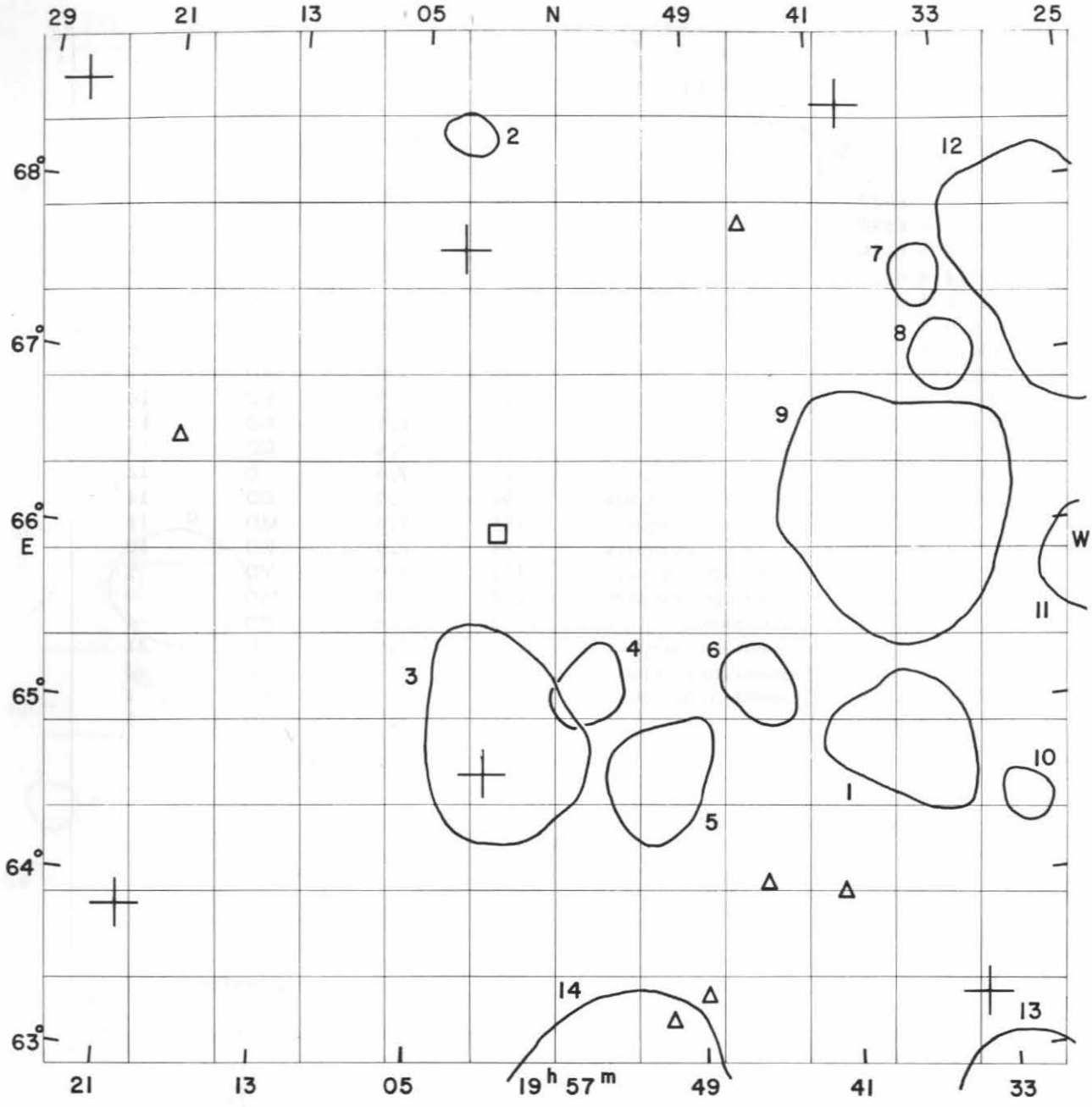
CLUSTERS OF GALAXIES

Cluster	Character	Population	Diameter in cm	Distance	Number on chart
1832.8 + 6827	medium compact	44	0.9	ED	7
1833.1 + 6840	compact	78	1.7	VD	6
1836.4 + 6430	compact	77	2.1	ED	20
1837.4 + 6333	medium compact	144	5.3	D	8
1839.6 + 6530	open	67	1.3	ED	22
1844.0 + 6613	open	162	10.5	MD	19
1850.0 + 6426	open	127	7.3	MD	18
1852.2 + 6818	medium compact	135	3.9	MD	17
1856.8 + 6616	compact	118	1.9	ED	16
1858.0 + 6801	open	90	1.9	ED	15
1908.7 + 6854	compact	79	1.6	ED	13
1908.8 + 6742	medium compact	137	7.0	D	12
1908.9 + 6416	medium compact	94	1.9	ED	14
1917.7 + 6340	medium compact	195	7.0	MD	11
1924.7 + 6500	medium compact	84	1.9	ED	10
1925.5 + 6546	medium compact	174	4.0	VD	5
1927.6 + 6726	medium compact	214	6.2	MD	9
1931.3 + 6424	compact	72	1.6	ED	4
1933.2 + 6236	medium compact	100	4.9	D	21
1934.0 + 6700	medium compact	68	2.1	ED	2
1935.1 + 6729	medium compact	60	1.7	VD	1
1937.0 + 6605	open	115	7.7	D	3

Average number of galaxies per cluster = 110.6

GALAXIES

Position α 1950 h m	Position δ 1950 ° ′	NGC IC*	m_p	V_s km/sec	Remarks
18 33.6	+ 67 06	6677+6679	13.6		double system, bridge
18 33.7	+ 67 04	4763*	13.9		
18 42.1	+ 63 58		15.7		extremely compact
18 53.5	+ 66 10		15.3		
18 53.7	+ 68 24		15.4		
18 59.0	+ 64 33		15.7		
19 02.6	+ 63 46		15.3		
19 02.7	+ 63 47		15.0		
19 05.2	+ 63 52	6762=6763	14.2		
19 13.2	+ 63 32		15.7		
19 16.3	+ 63 54	6789	13.7		
19 21.3	+ 63 10		15.6		
19 26.9	+ 65 12		15.4		
19 27.0	+ 65 13		15.6		



FIELD No. 324

19^h57^m $+66^\circ00'$

Survey Plate No. 777

GC STARS

Nos.	R.A.	Decl.	m_p
	h m s	° ′ ″	
27110	19 34 14.7	+ 63 19 22	6.64
27247	19 39 11.4	+ 68 32 08	6.90
27806	20 00 57.0	+ 64 40 50	5.43
27856	20 02 36.0	+ 67 43 51	4.66
28340	20 20 29.1	+ 63 49 10	5.92
28505	20 27 03.4	+ 68 36 03	7.24

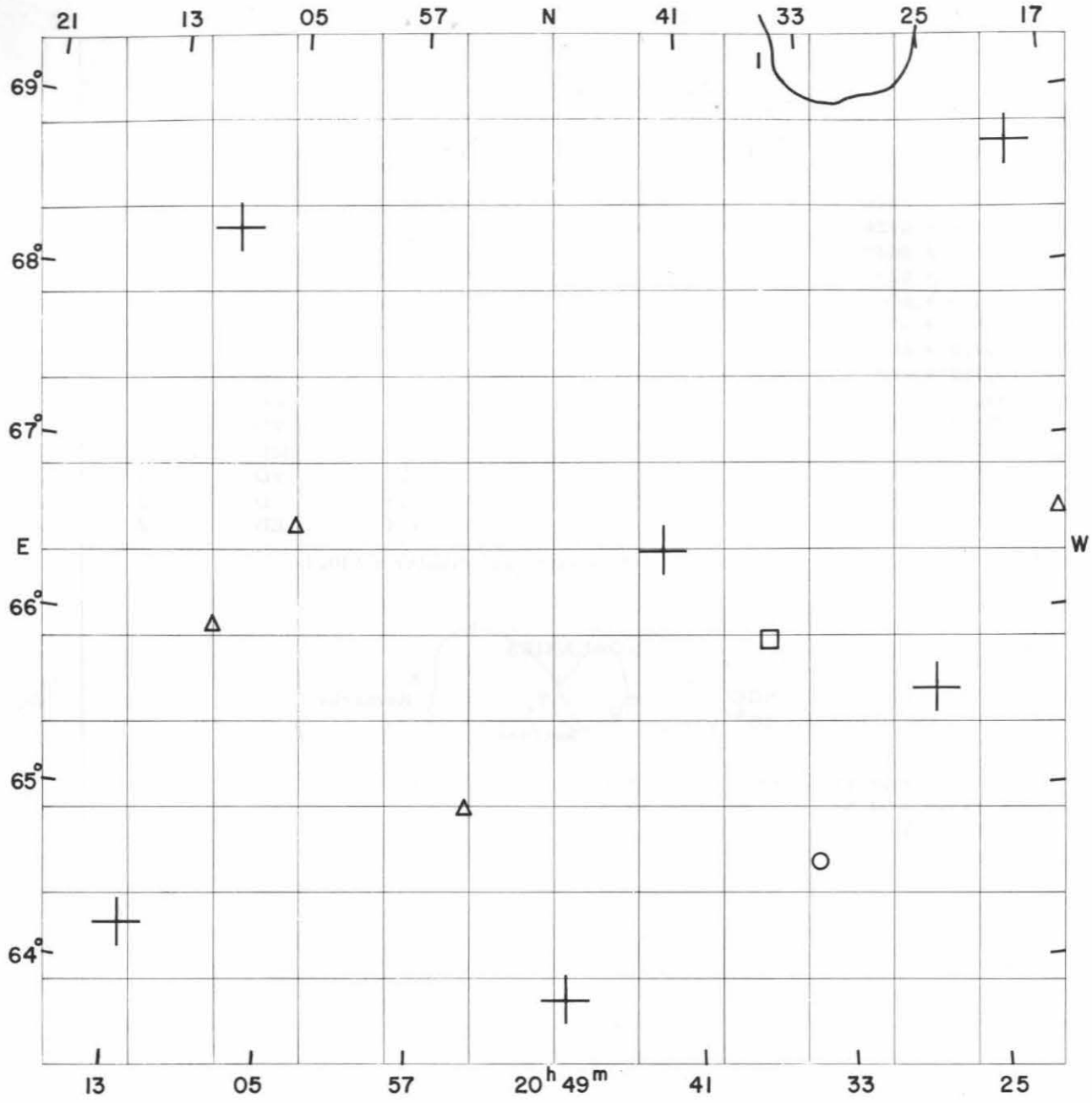
CLUSTERS OF GALAXIES

Cluster	Character	Population	Diameter in cm	Distance	Number on chart
1925.5 + 6546	medium compact	174	4.0	VD	11
1927.6 + 6726	medium compact	214	6.2	MD	12
1931.3 + 6424	compact	72	1.6	ED	10
1933.2 + 6236	medium compact	100	4.9	D	13
1934.0 + 6700	medium compact	68	2.1	ED	8
1935.1 + 6729	medium compact	60	1.7	VD	7
1937.0 + 6605	open	115	7.7	D	9
1937.7 + 6445	medium compact	100	4.4	D	1
1945.6 + 6509	compact	123	2.3	ED	6
1951.2 + 6436	medium compact	95	3.5	VD	5
1951.5 + 6148	open	343	14.0	MD	14
1955.1 + 6510	open	75	2.3	VD	4
2000.0 + 6449	medium compact	218	5.8	D	3
2002.4 + 6822	compact	64	1.4	ED	2

Average number of galaxies per cluster = 130.1

GALAXIES

Position α 1950 h m	Position δ o '	NGC IC*	m_p	V_s km/sec	Remarks
19 41.3	+ 63 57	6825	15.3		double nebula
19 45.5	+ 64 01		15.2		
19 45.8	+ 67 51		15.6		
19 48.8	+ 63 23		15.4		
19 50.8	+ 63 15		15.7		diffuse spiral
20 00.3	+ 66 05	6869	12.8		
20 19.2	+ 66 35	6911	15.7		extremely diffuse spiral



FIELD No. 325

20^h49^m $+66^\circ30'$

Survey Plate No. 546

GC STARS

Nos.	R.A.	Decl.	m_p
	h m s	o ' "	
28324	20 19 53.2	+ 68 43 13	5.99
28509	20 27 16.0	+ 65 35 20	6.62
28919	20 42 33.9	+ 66 28 31	5.57
29069	20 48 24.9	+ 63 51 19	6.38
29611	21 08 52.9	+ 68 17 12	Var.
29718	21 12 41.0	+ 64 11 51	6.41

CLUSTERS OF GALAXIES

Cluster	Character	Population	Diameter in cm	Distance	Number on chart
2030.0 + 6937	medium compact	95	5.6	MD	1

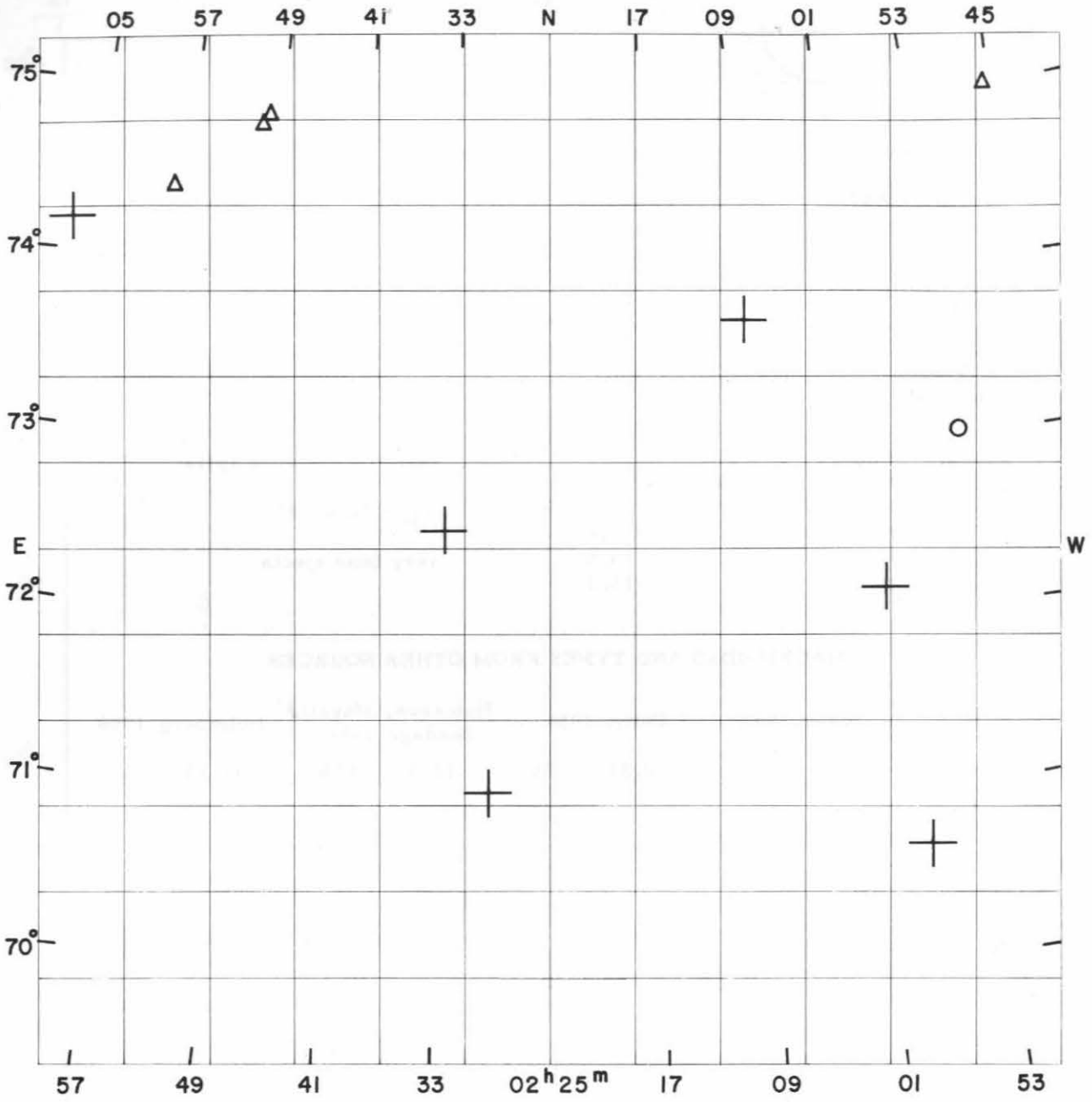
Average number of galaxies per cluster = 95.0

GALAXIES

Position α 1950 h m	Position δ o ′	NGC IC*	m_p	V_s km/sec	Remarks
20 19.2	+ 66 35	6911	15.7		extremely diffuse spiral
20 34.3	+ 64 38	6949	15.0		
20 36.6	+ 65 55	6951	12.3	+ 1364	m_H = 12.4 S
20 54.0	+ 64 58		15.4		
21 04.4	+ 66 35		15.5		very faint ejecta
21 08.8	+ 65 57		15.1		

MAGNITUDES AND TYPES FROM OTHER SOURCES

NGC IC*	Bigay 1951		Pettit 1954		Humason, Mayall, Sandage 1956		Holmberg 1958	
6951	-	-	12.88	SBb	12.5	SBb	11.84	Sb+



FIELD No. 326

2^h25^m $+72^o30'$

Survey Plate No. 1230

GC STARS

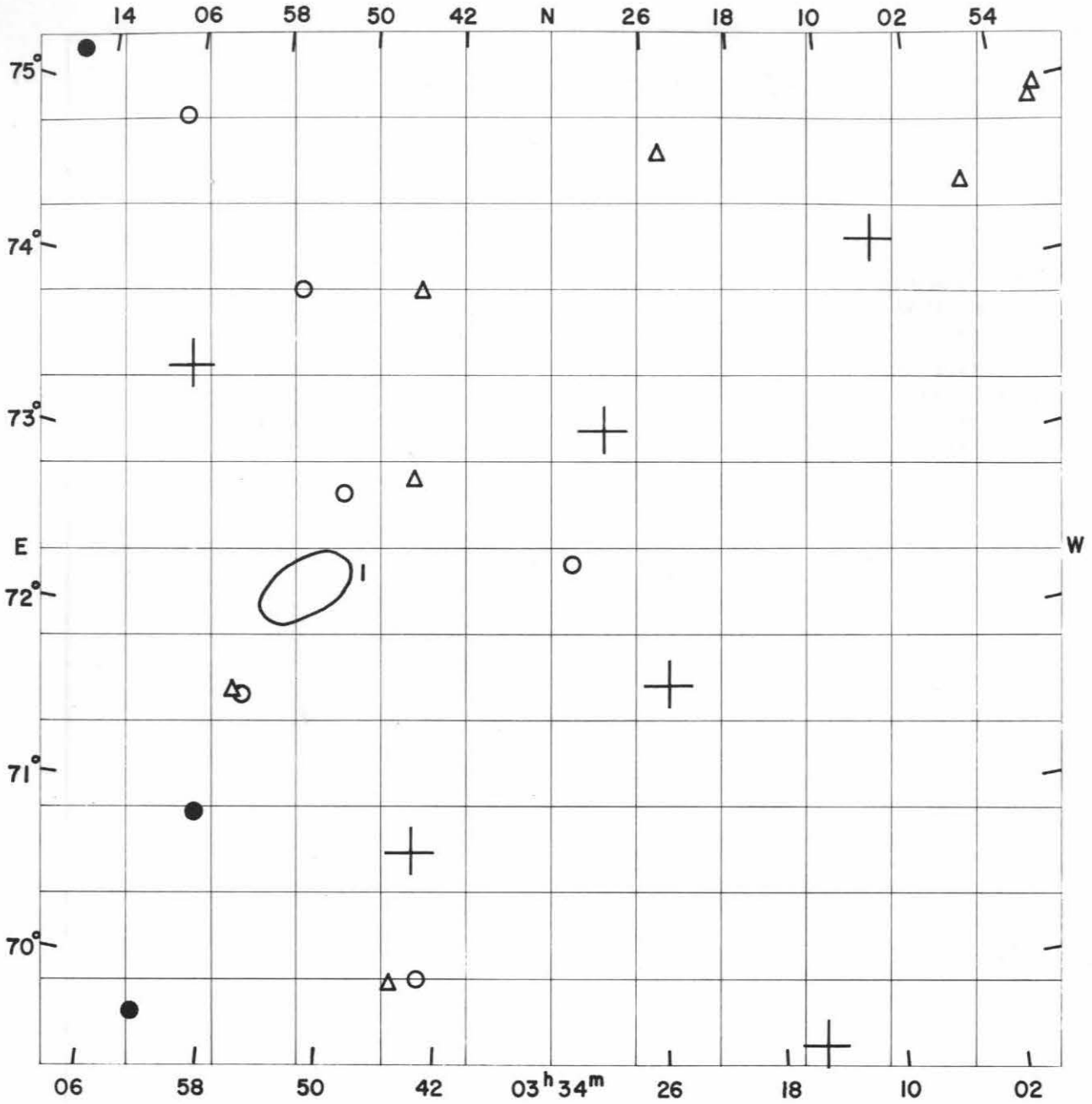
Nos.	R.A.	Decl.	m_p
	h m s	o ' "	
2424	1 57 48.5	+ 70 39 57	4.61
2445	1 59 07.2	+ 72 10 51	4.06
2618	2 08 41.7	+ 73 47 39	6.19
3041	2 29 23.7	+ 71 04 32	6.73
3116	2 33 13.8	+ 72 36 05	5.34
3759	3 06 27.8	+ 74 12 22	4.89

CLUSTERS OF GALAXIES

No clusters in this field

GALAXIES

Position α 1950 δ	NGC IC*	m_p	V_s km/sec	Remarks
h m o '				
1 45.4 +75 01		15.7		
1 51.9 +73 02		14.8		
2 50.2 +74 57		15.7		very diffuse spiral
2 50.9 +74 53		15.7		
2 58.0 +74 28		15.6		



FIELD No. 327

3^h34^m $+72^\circ30'$

Survey Plate No. 865

GC STARS

Nos.	R.A.	Decl.	m_p
	h m s	o ' "	
3759	3 06 27.8	+ 74 12 22	4.89
3938	3 15 16.4	+ 69 33 02	6.68
4116	3 25 06.0	+ 71 41 32	6.83
4225	3 29 40.8	+ 73 10 49	6.41
4530	3 43 59.6	+ 70 43 08	5.40
4934	4 03 30.9	+ 73 26 16	6.88

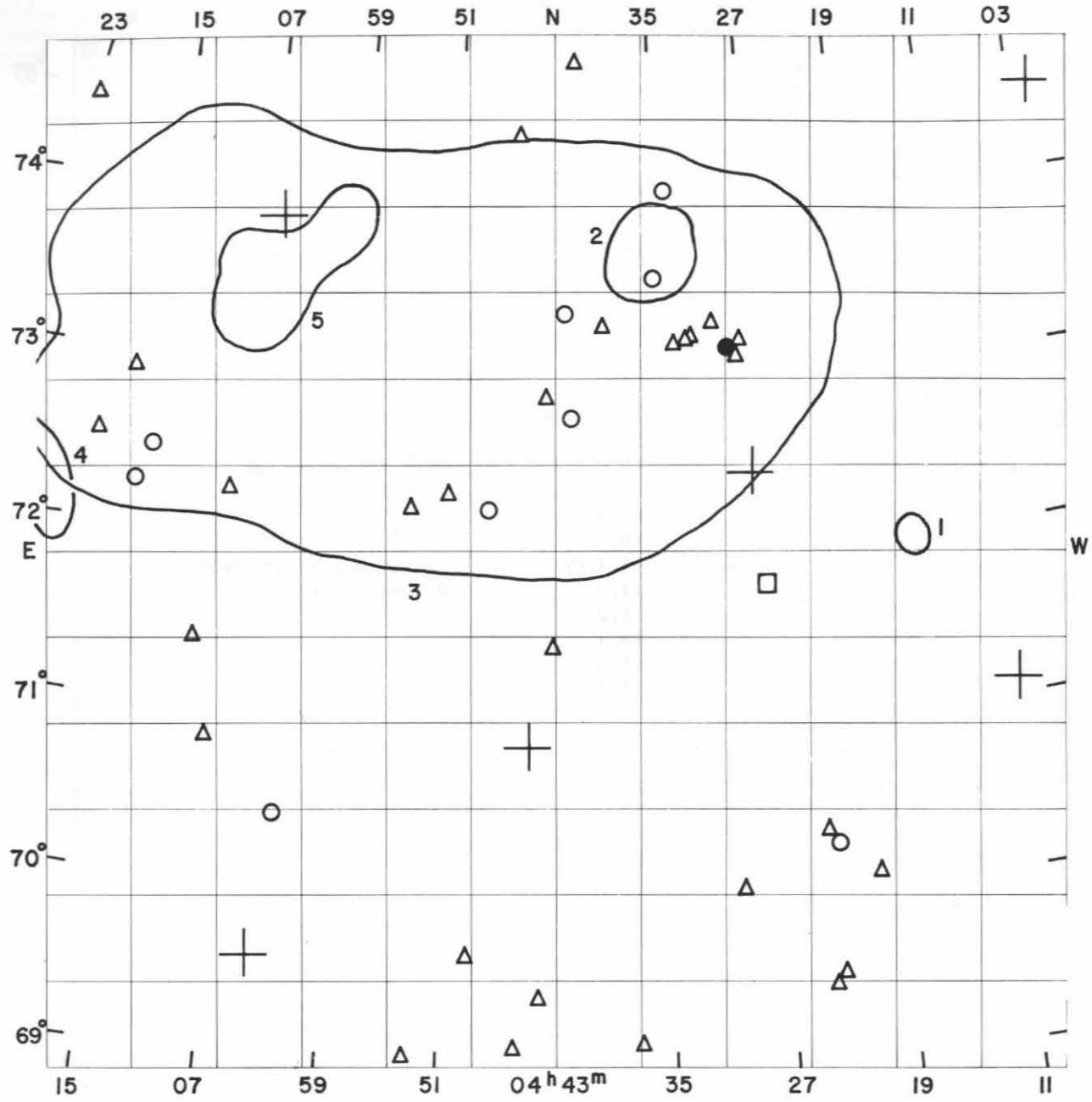
CLUSTERS OF GALAXIES

Cluster	Character	Population	Diameter in cm	Distance	Number on chart
0352.9 + 7214	medium compact	63	2.4	D	1

Average number of galaxies per cluster = 63.0

GALAXIES

Position α 1950 h m	Position δ 1950 o '	NGC IC*	m_p	V_s km/sec	Remarks
2 50.2	+ 74 57		15.7		very diffuse spiral
2 50.9	+ 74 53		15.7		
2 58.0	+ 74 28		15.6		
3 24.7	+ 74 45		15.6		
3 32.4	+ 72 24	1343	14.1		heavy ringshaped nucleus
3 43.3	+ 70 00		14.6		diffuse spiral
3 44.9	+ 73 58		15.2		
3 45.0	+ 72 52		15.1		
3 45.2	+ 69 57		15.5		
3 50.3	+ 72 46		14.7		
3 55.1	+ 73 56		14.3		
3 57.1	+ 71 34		14.9		
3 57.9	+ 71 35		15.7		
3 59.7	+ 70 52	1485	13.6		
4 02.6	+ 69 41	356*	13.3		
4 06.9	+ 74 53		15.0		
4 17.0	+ 75 12	1530	13.4		



FIELD No. 328

4^h43^m $+72^\circ00'$

Survey Plate No. 866

GC STARS

Nos.	R.A.	Decl.	m_p
	h m s	o ' "	
4884	4 01 19.4	+ 74 30 11	6.86
5052	4 09 15.4	+ 71 05 21	7.92
5478	4 27 41.0	+ 72 25 27	5.97
5835	4 44 59.4	+ 70 51 20	6.39
6245	5 04 07.6	+ 69 34 35	6.58
6288	5 06 02.7	+ 73 53 09	5.38

CLUSTERS OF GALAXIES

Cluster	Character	Population	Diameter in cm	Distance	Number on chart
0415.6 + 7159	compact	41	1.1	ED	1
0434.9 + 7342	medium compact	90	3.0	D	2
0452.2 + 7305	open	230	19.3	Near	3
0505.5 + 7331	compact	115	4.3	D	5
0527.1 + 7202	medium compact	136	4.9	MD	4

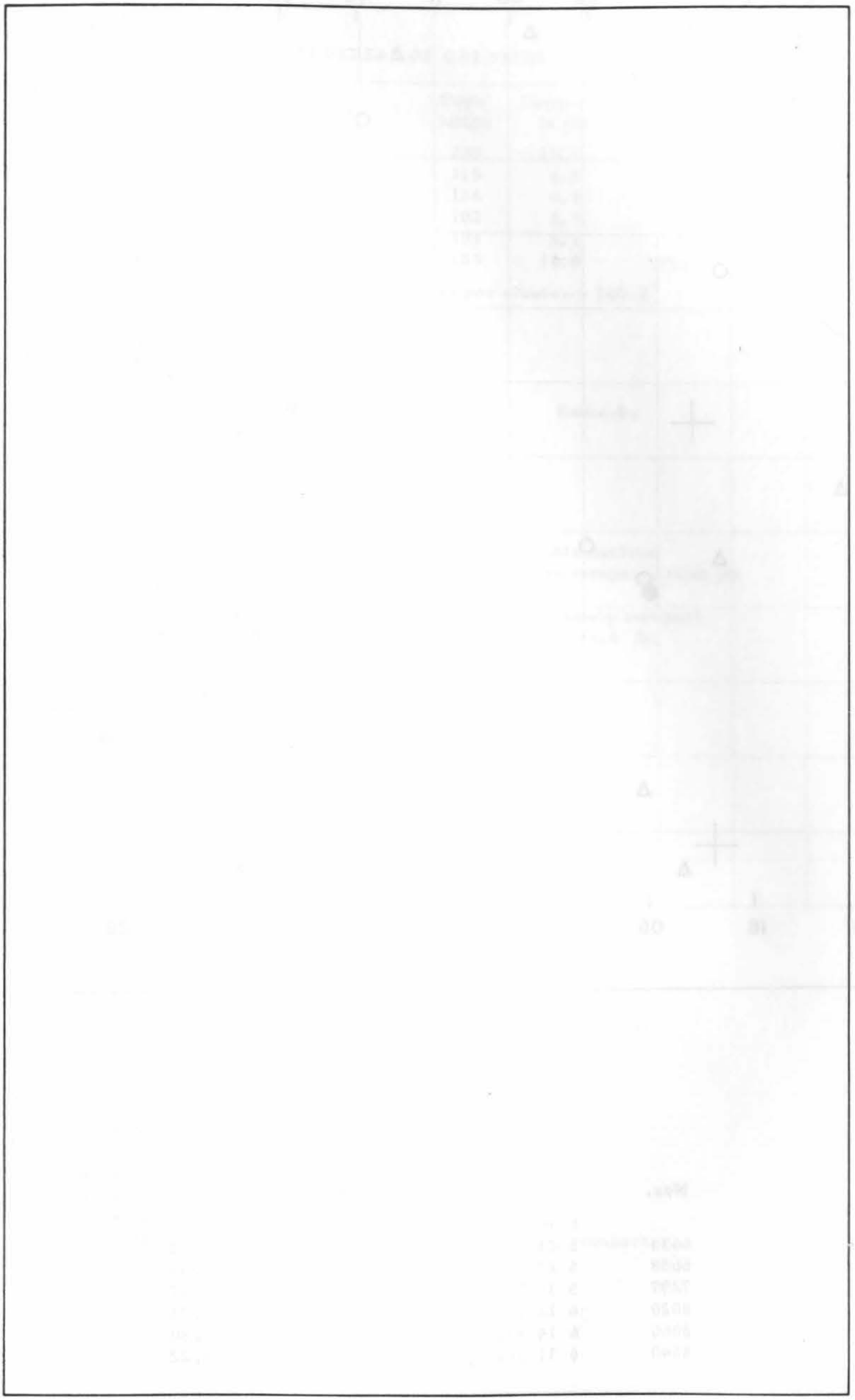
Average number of galaxies per cluster = 122.4

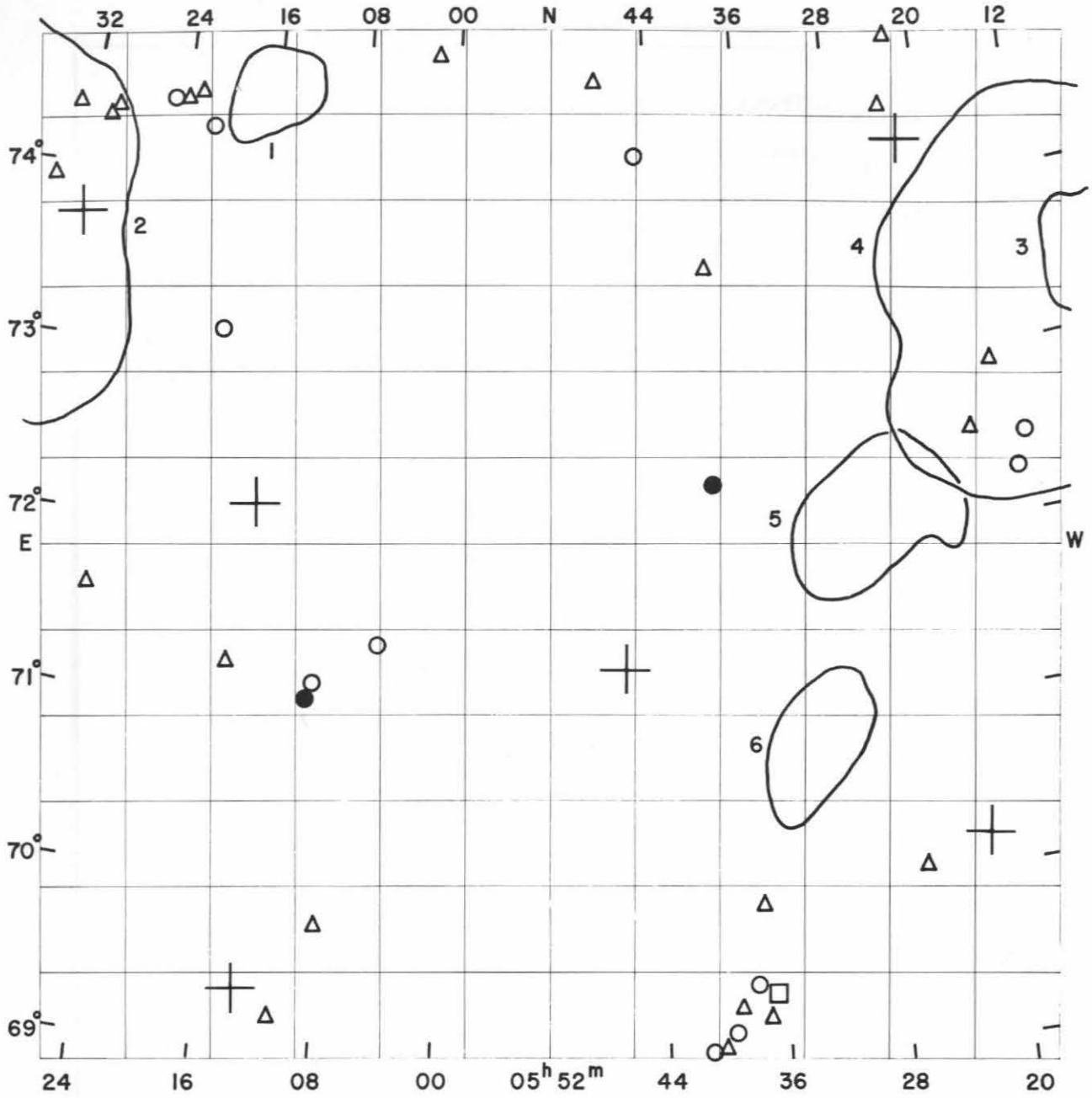
GALAXIES

Position α 1950 h m	Position δ 1950 o ′	NGC IC*	m_p	V_s km/sec	Remarks
4 20.7	+ 70 04		15.6		
4 23.2	+ 70 15		14.9		
4 23.4	+ 69 29		15.6		compact, twisted jet
4 23.9	+ 69 26		15.3		
4 24.0	+ 70 20		15.3		
4 27.1	+ 71 47	1560=2062*	12.1		
4 28.2	+ 73 11		15.5		
4 28.4	+ 73 05		15.1		
4 29.0	+ 73 09	1573	13.3		
4 29.9	+ 70 01		15.5		
4 30.2	+ 73 18		15.7		compact
4 32.2	+ 73 12		15.5		
4 32.4	+ 73 12		15.7		
4 33.5	+ 73 11		15.4		
4 33.9	+ 74 05		14.8		
4 35.0	+ 73 34		15.0		
4 37.3	+ 69 09		15.4		
4 39.2	+ 73 17		15.3		
4 41.4	+ 74 50		15.7		plume + streamers
4 41.8	+ 72 46		14.8		
4 42.3	+ 73 22		14.6		
4 43.3	+ 71 27		15.3		
4 43.8	+ 72 53		15.6		
4 44.2	+ 69 24		15.3		
4 45.9	+ 69 06		15.7		
4 46.1	+ 74 24		15.2		
4 48.2	+ 72 14		14.5		
4 49.2	+ 69 39		15.4		diffuse spiral
4 51.3	+ 72 20		15.2		
4 53.3	+ 69 03		15.4		compact
4 54.2	+ 72 15		15.4		
5 03.1	+ 70 26		15.0		diffuse spiral
5 08.2	+ 72 16		15.6		extremely diffuse spiral
5 08.4	+ 70 50		15.7		
5 10.0	+ 71 25		15.2		very diffuse spiral
5 14.6	+ 72 29		14.9		
5 15.7	+ 72 17		14.7		
5 16.7	+ 72 55		15.1		
5 19.0	+ 72 32		15.2		double nucleus
5 23.3	+ 74 28		15.6		

MAGNITUDES AND TYPES FROM OTHER SOURCES

NGC IC*	Bigay 1951		Pettit 1954		Humason, Mayall, Sandage 1956		Holmberg 1958	
1560	-	-	-	-	-	-	12.19	Sc+





FIELD No. 329

5^h52^m + 72°00'

Survey Plate No. 975

GC STARS

Nos.	R.A.	Decl.	m_p
	h m s	o ' "	
6633	5 21 10.0	+ 70 11 06	7.04
6658	5 22 01.4	+ 74 15 57	6.94
7297	5 46 26.8	+ 71 16 35	7.17
8020	6 13 20.4	+ 69 20 27	4.73
8060	6 14 41.4	+ 72 10 04	6.80
8540	6 31 36.9	+ 73 44 16	6.22

CLUSTERS OF GALAXIES

Cluster	Character	Population	Diameter in cm	Distance	Number on chart
0452.2 + 7305	open	230	19.3	Near	4
0505.5 + 7331	compact	115	4.3	D	3
0527.1 + 7202	medium compact	136	4.9	MD	5
0532.8 + 7046	open	102	3.7	D	6
0616.1 + 7433	compact	103	3.1	D	1
0642.0 + 7334	open	155	12.8	Near	2

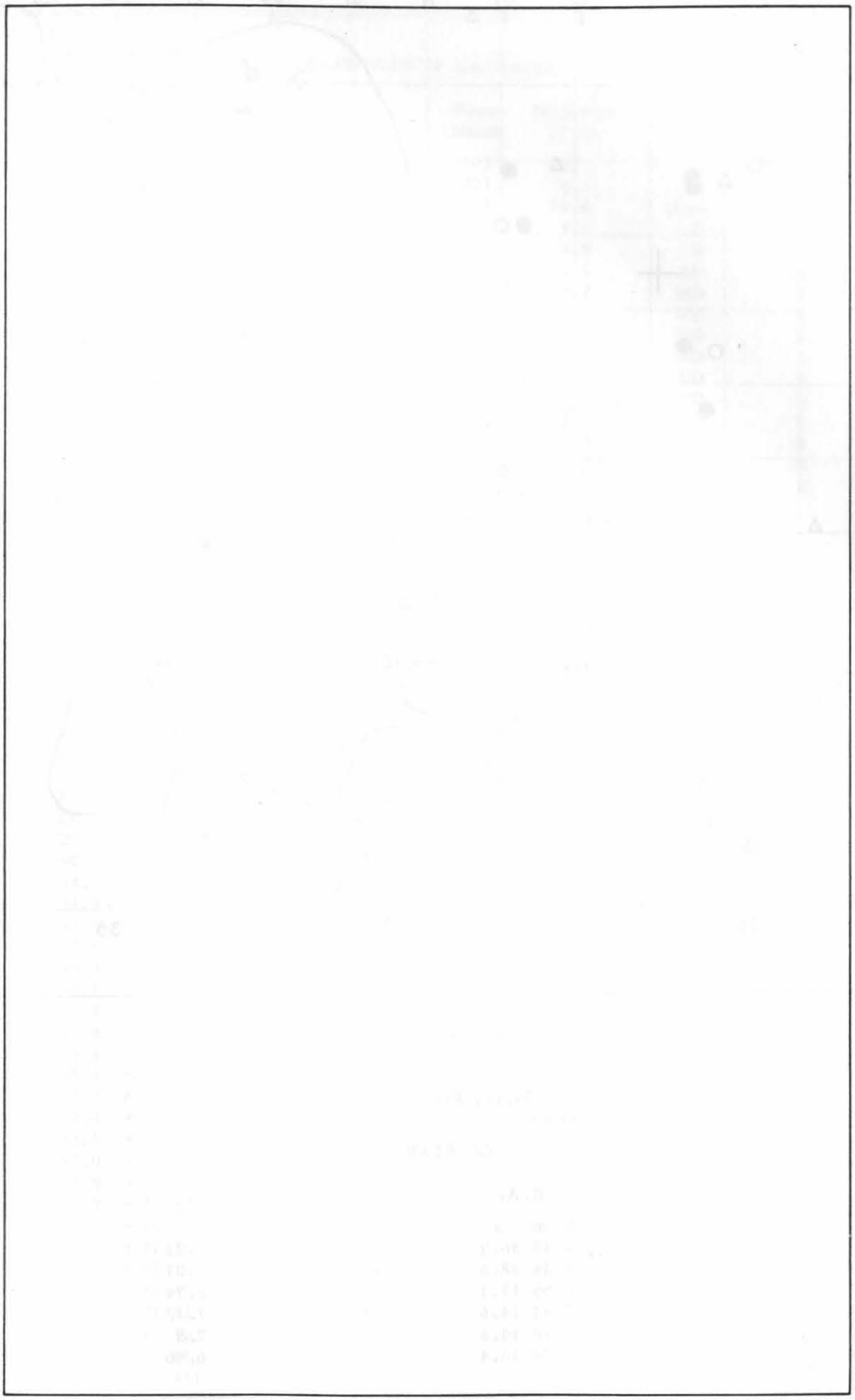
Average number of galaxies per cluster = 140.2

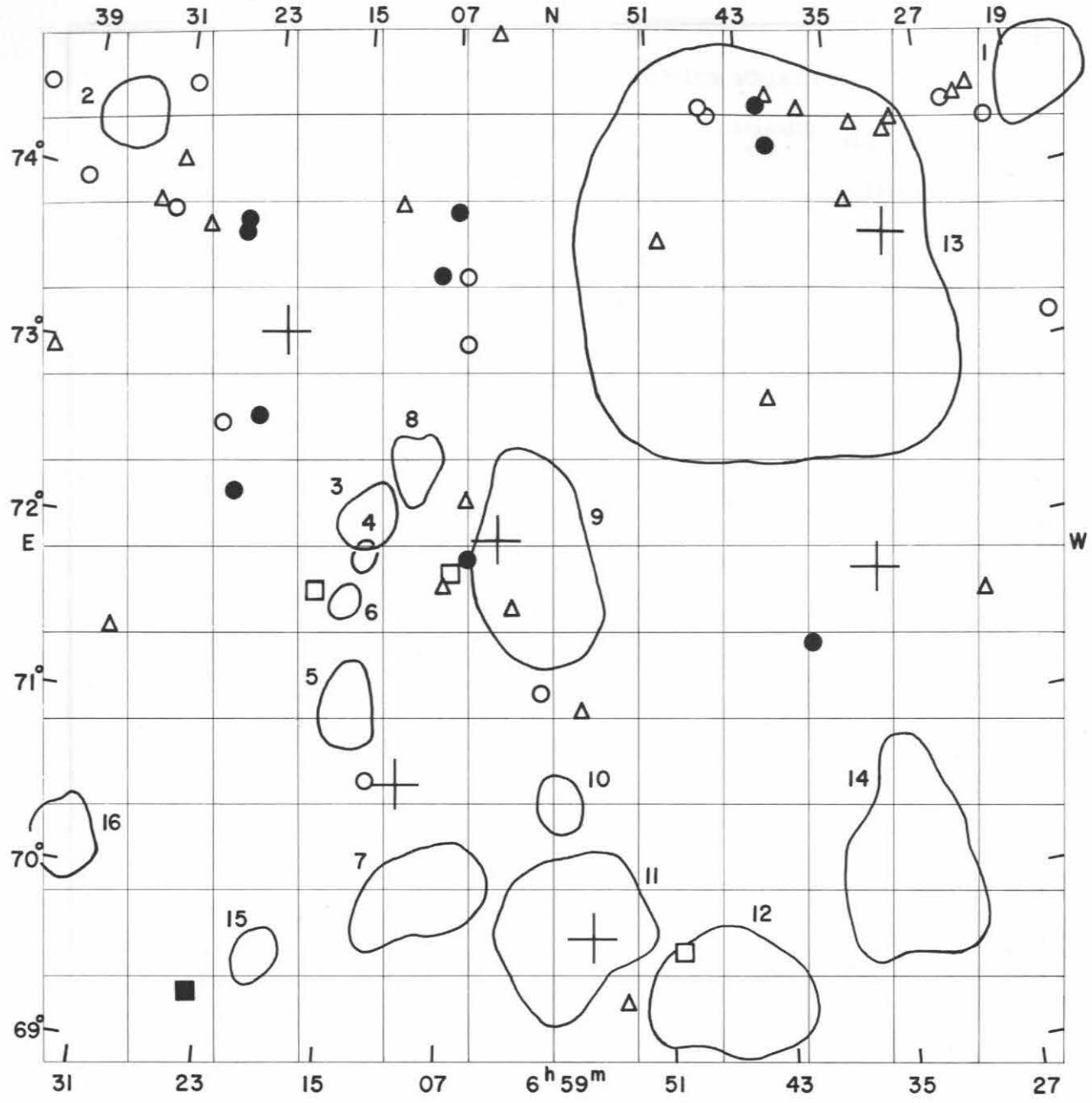
GALAXIES

Position α 1950 h m	Position δ o ′	NGC IC*	m_p	V_s km/sec	Remarks
5 14.6	+ 72 29		14.9		
5 15.7	+ 72 17		14.7		
5 16.7	+ 72 55		15.1		
5 19.0	+ 72 32		15.2		double nucleus
5 22.1	+ 74 52		15.7		very compact, faint jet
5 23.3	+ 74 28		15.6		
5 25.9	+ 70 01		15.7		extremely compact
5 36.6	+ 69 21	1961=2133*	12.2	+ 3870	m_H = 11.6 Sc
5 37.1	+ 69 13		15.6		
5 37.2	+ 69 52		15.1		
5 37.8	+ 69 25		14.8		
5 39.0	+ 69 17		15.4		
5 39.2	+ 72 19		13.9		
5 39.2	+ 73 35		15.4		
5 39.5	+ 69 09		14.7		
5 40.2	+ 69 02		15.1		
5 41.1	+ 69 02		14.4		
5 44.9	+ 74 15		15.0		
5 48.4	+ 74 41		15.5		compact
6 02.0	+ 74 50		15.7		
6 04.7	+ 71 23		14.6		
6 08.0	+ 69 45		15.2		
6 09.3	+ 71 09		14.5		
6 09.8	+ 71 03		13.8		
6 10.8	+ 69 12		15.3		
6 15.9	+ 71 15		15.7		diffuse spiral
6 18.6	+ 73 08		14.6		
6 21.5	+ 74 18		15.0		
6 22.6	+ 74 30		15.5		
6 23.9	+ 74 28		15.6		
6 25.0	+ 74 27		14.9		
6 26.7	+ 71 36		15.6		
6 29.8	+ 74 21		15.5		
6 30.4	+ 74 18		15.3		
6 33.2	+ 74 21		15.2		
6 34.3	+ 73 55		15.7		very compact

MAGNITUDES AND TYPES FROM OTHER SOURCES

NGC IC*	Bigay 1951		Pettit 1954		Humason, Mayall, Sandage 1956		Holmberg 1958	
1961	-	-	12.09	Sb	-	Sb	11.68	Sb+





FIELD No. 330

6^h59^m + 72°00'

Survey Plate No. 665

GC STARS

Nos.	R.A.	Decl.	m_p
	h m s	° ' "	
8540	6 31 36.9	+ 73 44 16	6.22
8630	6 34 38.6	+ 71 47 38	6.07
9172	6 56 17.1	+ 69 43 02	6.74
9364	7 03 14.6	+ 72 02 20	7.12
9548	7 10 14.6	+ 70 35 41	7.8
9848	7 20 35.4	+ 73 10 54	6.96

CLUSTERS OF GALAXIES

Cluster	Character	Population	Diameter in cm	Distance	Number on chart
0616.1 + 7433	compact	103	3.1	D	1
0634.2 + 7002	medium compact	201	5.3	D	14
0642.0 + 7334	open	155	12.8	Near	13
0647.0 + 6921	medium compact	107	4.6	D	12
0657.8 + 6946	open	99	4.9	D	11
0658.7 + 7031	medium compact	69	1.6	ED	10
0700.1 + 7151	medium compact	129	5.2	MD	9
0708.2 + 6958	open	126	3.6	VD	7
0709.8 + 7227	open	86	1.8	VD	8
0713.2 + 7208	compact	121	2.0	ED	3
0713.4 + 7155	compact	73	1.0	ED	4
0714.0 + 7101	medium compact	109	2.1	VD	5
0714.8 + 7140	medium compact	51	1.0	ED	6
0719.3 + 6934	medium compact	60	1.6	ED	15
0733.0 + 7008	compact	73	2.2	VD	16
0735.7 + 7421	compact	83	2.2	VD	2

Average number of galaxies per cluster = 102.8

GALAXIES

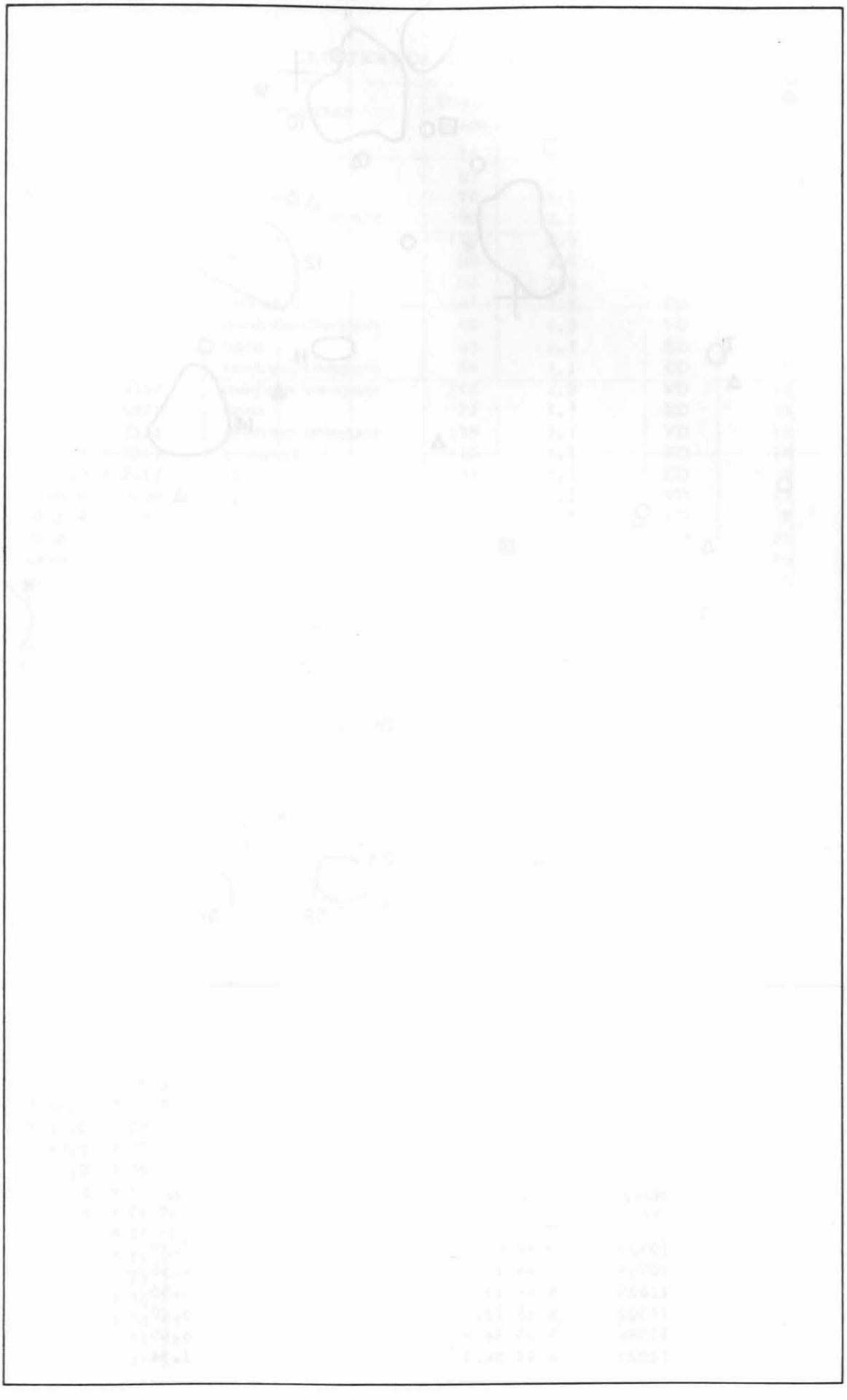
Position α 1950 δ	NGC IC*	m_p	V_s km/sec	Remarks
h m o '				
6 18.6 + 73 08		14.6		
6 21.5 + 74 18		15.0		
6 22.6 + 74 30		15.5		
6 23.9 + 74 28		15.6		
6 25.0 + 74 27		14.9		
6 26.7 + 71 36		15.6		
6 29.8 + 74 21		15.5		
6 30.4 + 74 18		15.3		
6 33.2 + 74 21		15.2		
6 34.3 + 73 55		15.7		very compact
6 37.8 + 74 28		15.4		
6 39.8 + 71 24	449*	13.7		
6 40.3 + 74 34		15.4		
6 40.7 + 74 17	2256	14.0		
6 41.1 + 74 30	2258	13.2		
6 41.9 + 72 48		15.7		
6 45.6 + 74 28	450*	14.8		
6 46.3 + 74 31	451*	14.9		
6 50.0 + 69 39		12.9		
6 50.4 + 73 45		15.7		extremely compact
6 53.9 + 69 21		15.6		
6 57.0 + 71 02		15.3		
6 59.9 + 71 08		14.9		
7 02.2 + 71 38		15.3		
7 03.6 + 74 59		15.5		
7 05.6 + 71 55		13.1		
7 05.8 + 72 15		15.2		very diffuse spiral
7 05.9 + 73 09		15.0		
7 06.0 + 73 32		14.4		
7 06.8 + 71 50		12.7		
7 07.0 + 73 55		13.9		
7 07.3 + 71 45		15.7		

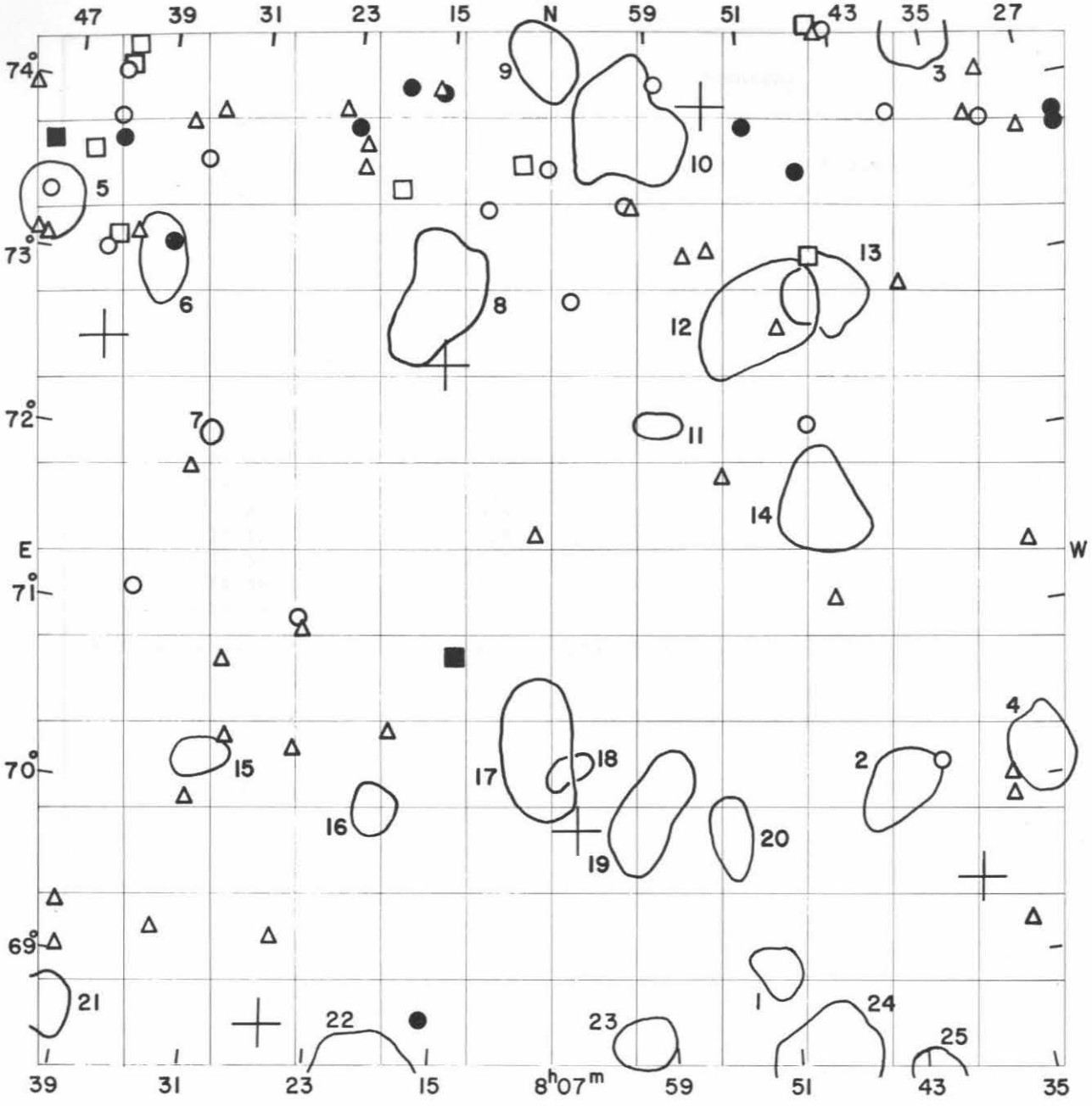
Position α 1950 h m	Position δ o '	NGC IC*	m_p	V_s km/sec	Remarks
7 08.2	+ 73 33		13.7		extensive jets + plume
7 11.7	+ 73 57		15.7		
7 12.4	+ 70 37		15.0		
7 17.0	+ 71 42		13.0		
7 22.3	+ 72 40		13.9		
7 23.6	+ 69 18	2366	11.6	+ 194	m_H = 12.6 I *)
7 23.6	+ 72 14		13.8		triple system in halo
7 24.7	+ 73 44		13.8		
7 24.7	+ 73 49		13.3		
7 25.1	+ 72 37		15.0		
7 27.8	+ 73 45		15.1		
7 30.4	+ 74 37		14.8		interacting double system
7 30.5	+ 74 06		15.5		
7 30.8	+ 73 49		14.9		
7 31.8	+ 71 23		15.6		
7 32.0	+ 73 51		15.5		
7 38.6	+ 73 56		14.7		
7 39.0	+ 72 55		15.1		
7 43.2	+ 74 27		14.4		

*) A bright emission patch at the SW end of NGC 2366 is identified as NGC 2363.

MAGNITUDES AND TYPES FROM OTHER SOURCES

NGC IC*	Bigay 1951		Pettit 1954		Humason, Mayall, Sandage 1956		Holmberg 1958	
2366	-	-	11.61	Irr.	11.5	Irr.	11.41	Ir. I





FIELD No. 331

8^h07^m $+71^\circ30'$

Survey Plate No. 680

GC STARS

Nos.	R.A.	Decl.	m_p
	h m s	o ' "	
10324	7 38 02.2	+ 69 27 20	7.29
10745	7 54 15.1	+ 74 03 17	5.56
11029	8 05 11.1	+ 69 52 14	6.55
11302	8 15 12.1	+ 72 33 55	6.20
11586	8 25 54.8	+ 68 40 58	6.89
12027	8 41 56.4	+ 72 34 08	7.54

CLUSTERS OF GALAXIES

Cluster	Character	Population	Diameter in cm	Distance	Number on chart
0733.0 + 7008	compact	73	2.2	VD	4
0735.7 + 7421	compact	83	2.2	VD	3
0742.2 + 6817	compact	78	1.7	ED	25
0743.1 + 7002	medium compact	90	2.3	ED	2
0745.4 + 7252	compact	150	2.5	ED	13
0746.9 + 7141	compact	82	2.9	ED	14
0749.2 + 6826	open	83	3.4	VD	24
0750.8 + 7246	compact	141	3.5	ED	12
0752.2 + 6900	medium compact	54	1.5	VD	1
0754.8 + 6949	open	69	1.7	ED	20
0759.1 + 7211	medium compact	55	1.1	ED	11
0800.4 + 6958	medium compact	112	2.8	VD	19
0800.9 + 6835	open	71	1.7	ED	23
0801.0 + 7355	medium compact	135	3.7	VD	10
0806.0 + 7013	compact	110	1.1	ED	18
0807.9 + 7417	open	101	2.3	ED	9
0808.0 + 7020	open	75	3.3	VD	17
0816.1 + 7256	open	110	3.3	VD	8
0818.7 + 6811	medium compact	197	4.2	D	22
0819.2 + 6958	compact	61	1.5	ED	16
0831.5 + 7011	compact	48	1.5	ED	15
0833.0 + 7203	medium compact	56	0.6	ED	7
0838.4 + 7301	medium compact	121	2.1	ED	6
0839.8 + 6837	medium compact	76	1.9	VD	21
0847.9 + 7317	medium compact	95	2.2	VD	5

Average number of galaxies per cluster = 93.0

GALAXIES

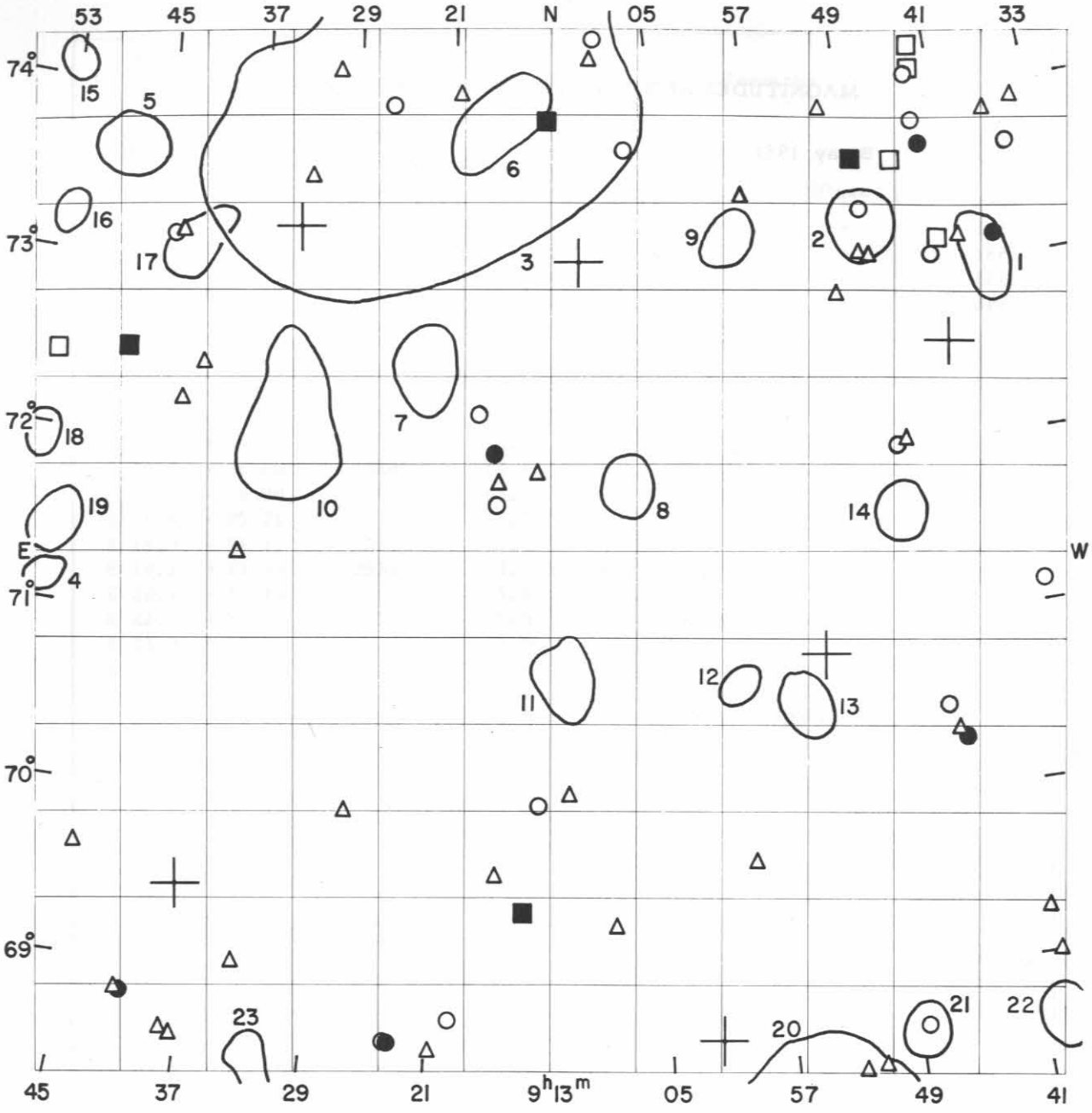
Position α 1950 h m	Position δ 1950 o '	NGC IC*	m_p	V_s km/sec	Remarks
7 24.7	+ 73 44		13.8		
7 24.7	+ 73 49		13.3		
7 27.8	+ 73 45		15.1		
7 30.5	+ 74 06		15.5		
7 30.8	+ 73 49		14.9		
7 31.8	+ 71 23		15.6		
7 32.0	+ 73 51		15.5		
7 35.2	+ 69 11		15.7		
7 35.2	+ 70 03		15.1		very compact
7 35.3	+ 69 56		15.4		very compact
7 38.6	+ 73 56		14.7		
7 39.0	+ 72 55		15.1		
7 39.9	+ 70 10		14.2		
7 43.2	+ 74 27		14.4		*) see footnote
7 44.2	+ 74 26		15.6		*) see footnote
7 44.8	+ 74 28		12.7		*) see footnote
7 46.1	+ 73 08	2441	12.7	+ 3623	m_H = 12.7 S
7 46.3	+ 71 10		15.6		
7 46.7	+ 73 38		13.6		
7 47.3	+ 72 10		14.3		
7 49.2	+ 72 45		15.4		diffuse spiral
7 51.0	+ 73 55		13.9		
7 54.0	+ 71 53		15.7		

Position α 1950 h m	Position δ o '	NGC IC*	m_p	V_s km/sec	Remarks
7 54.4	+ 73 12		15.5		
7 56.3	+ 73 10		15.7		extremely diffuse
7 58.2	+ 74 11		14.5		
8 00.3	+ 73 28		15.6		
8 01.0	+ 73 29		14.6		
8 05.4	+ 72 57		14.4		
8 07.2	+ 73 43		14.8		
8 08.1	+ 71 35		15.7		extremely compact
8 09.3	+ 73 44	2523	12.4	+ 3448	m_H = 12.7
8 12.1	+ 73 28		14.1		
8 14.1	+ 70 52		11.3	+ 164	Holmberg II, m_p = 11.14
8 15.7	+ 68 47		13.8		
8 15.9	+ 74 08	2544	13.4		
8 16.2	+ 74 09		15.5		
8 18.4	+ 70 26		15.7		diffuse
8 18.9	+ 74 10	2550	13.1		
8 19.1	+ 73 35	2551	12.7	+ 2296	m_H = 13.1
8 22.1	+ 73 49		15.5		
8 22.2	+ 73 41		15.6		very diffuse spiral
8 23.0	+ 73 55		13.5		
8 24.1	+ 74 01		15.6		
8 24.9	+ 71 00		15.4		
8 25.0	+ 70 18		15.4		very compact
8 25.3	+ 71 04		15.0		
8 25.6	+ 69 13		15.5		extremely compact
8 29.8	+ 70 21		15.7		extremely diffuse
8 30.6	+ 70 47		15.3		
8 32.1	+ 69 58		15.3		
8 33.5	+ 69 13		15.2		
8 34.1	+ 71 53		15.4		
8 34.5	+ 73 55		15.6		
8 35.4	+ 73 40	511*	14.5		
8 36.9	+ 73 52		15.5		
8 37.5	+ 71 09		15.0		
8 37.5	+ 73 09	2614	14.0		diffuse spiral
8 39.5	+ 69 01		15.3		extremely compact
8 39.9	+ 69 16		15.4		
8 40.2	+ 73 11		15.2		
8 42.0	+ 73 10	2629	12.8		
8 42.6	+ 74 17	2633	12.4	+ 2228	m_H = 12.6 SBc
8 42.7	+ 73 43	2389*	13.2	+ 2632	double system, bridge
8 42.8	+ 73 05	2641	15.0		compact
8 43.0	+ 74 09	2634	12.6		
8 43.1	+ 73 50	2636	14.4		
8 43.3	+ 74 07		14.3		
8 45.1	+ 73 39	2646	13.0	+ 3546	m_H = 12.8
8 47.6	+ 73 06		15.7		very diffuse
8 48.0	+ 73 23		14.6		
8 48.4	+ 73 08		15.6		
8 48.4	+ 73 41	520*	11.9		
8 50.6	+ 73 59		15.7		diffuse

*) These galaxies are located outside the $6^o \times 6^o$ area of this field and also of the adjacent field No. 349.

MAGNITUDES AND TYPES FROM OTHER SOURCES

NGC IC*	Bigay 1951		Pettit 1954		Humason, Mayall, Sandage 1956		Holmberg 1958	
2441	-	-	13.08	Sc	13.0	Sc	-	-
2523	-	-	12.64	S	12.6	SBb	-	-
2551	-	-	13.22	Sab	13.2	Sab	-	-
2633	-	-	13.00	SBc	12.8	SBb	-	-
2646	-	-	13.1	SB0	13.1	SB0	-	-



FIELD No. 332

9^h13^m $+71^\circ30'$

Survey Plate No. 1325

GC STARS

Nos.	R.A.	Decl.	m_p
	h m s	o ' "	
12027	8 41 56.4	+ 72 34 08	7.54
12345	8 53 26.4	+ 70 50 54	7.17
12535	9 01 50.4	+ 68 38 42	6.95
12726	9 10 54.2	+ 73 09 18	5.89
13252	9 33 12.6	+ 73 18 20	7.20
13358	9 38 00.1	+ 69 28 00	5.74

CLUSTERS OF GALAXIES

Cluster	Character	Population	Diameter in cm	Distance	Number on chart
0838.4 + 7301	medium compact	121	2.1	ED	1
0839.8 + 6837	medium compact	76	1.9	VD	22
0847.0 + 7137	open	64	1.7	ED	14
0847.9 + 7317	medium compact	95	2.2	VD	2
0848.8 + 6836	compact	80	1.6	ED	21
0855.2 + 7034	open	94	1.8	ED	13
0858.9 + 7314	compact	115	1.7	ED	9
0859.8 + 7042	medium compact	51	1.3	ED	12
0901.2 + 6640	open	189	16.7	Near	20
0907.1 + 7151	open	93	1.8	VD	8
0912.2 + 7045	medium compact	94	2.1	VD	11
0917.6 + 7356	medium compact	124	2.7	D	6
0922.8 + 7231	compact	121	2.4	VD	7
0923.9 + 7353	medium compact	348	11.7	Near	3
0932.2 + 6828	medium compact	58	1.5	ED	23
0933.1 + 7207	open	98	3.8	D	10
0941.7 + 7307	medium compact	104	2.0	ED	17
0947.9 + 7338	open	134	2.2	VD	5
0949.4 + 7125	medium compact	104	1.7	VD	19
0949.7 + 7107	compact	94	1.1	ED	4
0951.3 + 7155	medium compact	79	1.3	ED	18
0952.0 + 7312	compact	75	1.1	ED	16
0953.1 + 7406	compact	63	1.1	ED	15

Average number of galaxies per cluster = 107.6

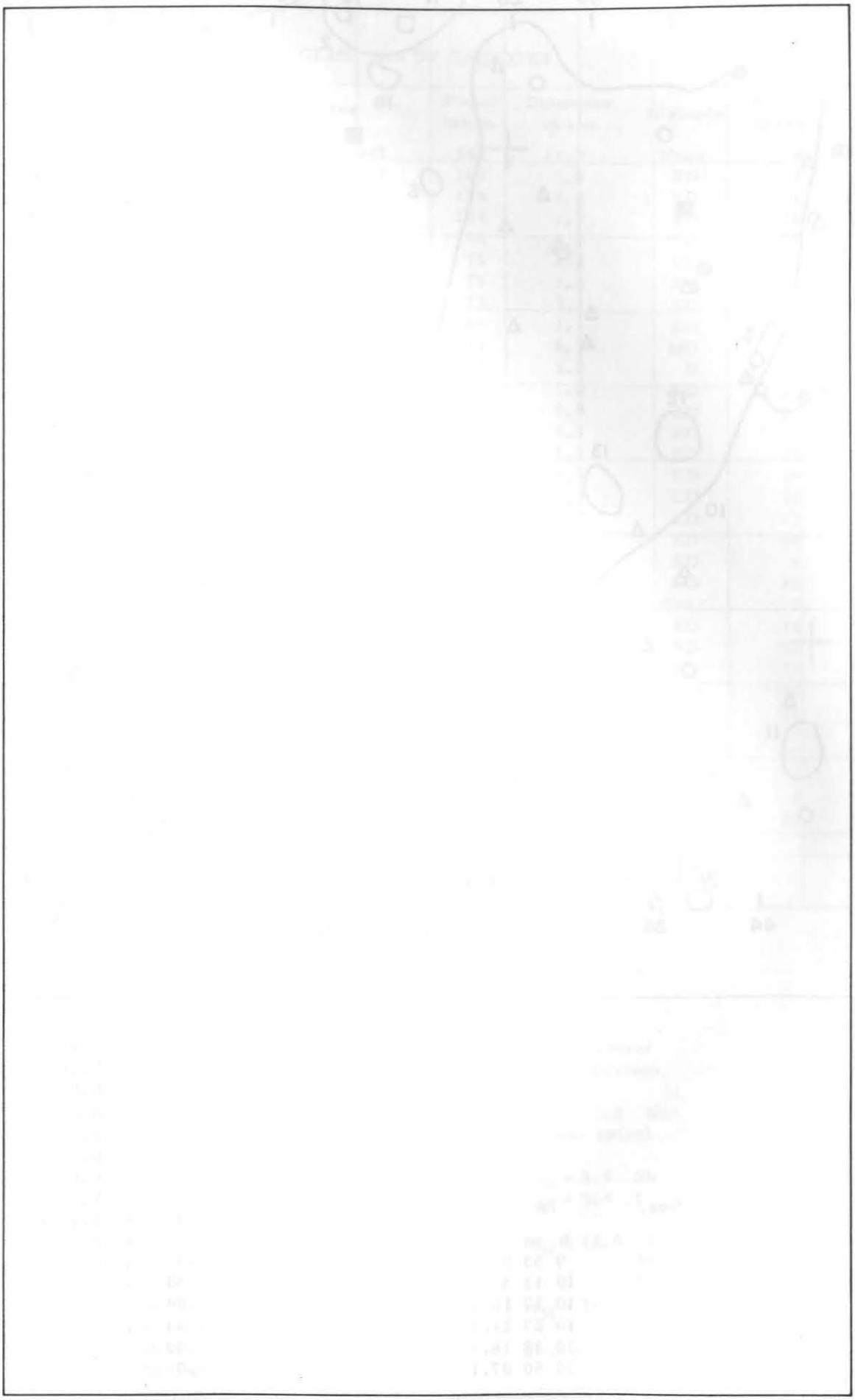
GALAXIES

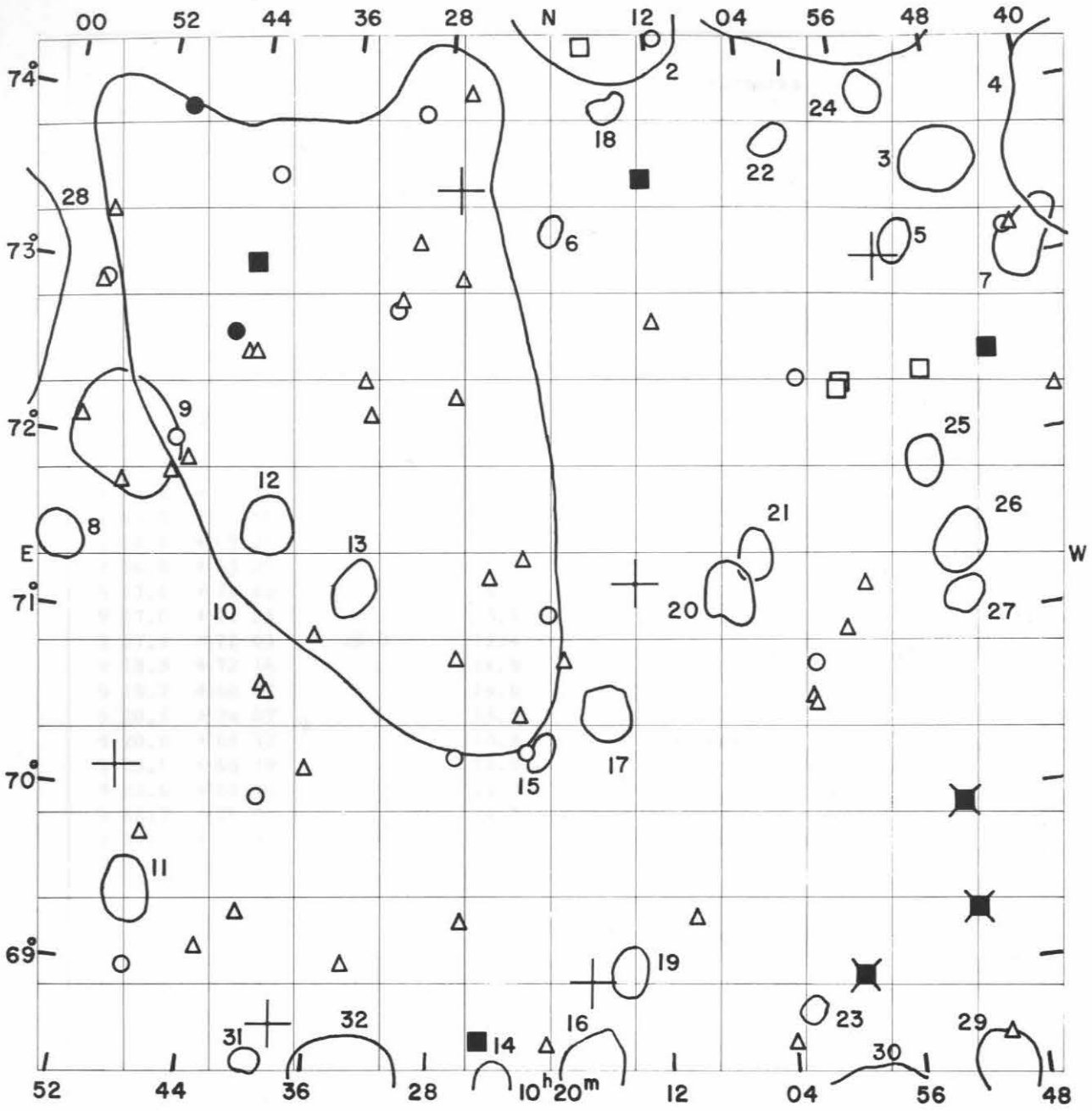
Position α 1950 h m	Position δ 1950 ° ′	NGC IC*	m_p	V_s km/sec	Remarks
8 34.5	+ 73 55		15.6		
8 35.4	+ 73 40	511*	14.5		
8 36.9	+ 73 52		15.5		
8 37.5	+ 71 09		15.0		
8 37.5	+ 73 09	2614	14.0		diffuse spiral
8 39.5	+ 69 01		15.3		extremely compact
8 39.9	+ 69 16		15.4		
8 40.2	+ 73 11		15.2		
8 42.0	+ 73 10	2629	12.8		
8 42.6	+ 74 17	2633	12.4	+ 2228	m_H = 12.6 SBc
8 42.7	+ 73 43	2389*	13.2	+ 2632	double system, bridge
8 42.8	+ 73 05	2641	15.0		compact
8 43.0	+ 74 09	2634	12.6		
8 43.1	+ 73 50	2636	14.4		
8 43.3	+ 74 07		14.3		
8 44.0	+ 70 18		13.4		double nucleus
8 44.4	+ 70 21		15.5		compact
8 45.0	+ 70 30	2650	14.3		
8 45.1	+ 73 39	2646	13.0	+ 3546	m_H = 12.8
8 46.0	+ 72 02		15.5		double system
8 46.8	+ 72 00		15.0		
8 47.6	+ 73 06		15.7		very diffuse
8 48.0	+ 73 23		14.6		
8 48.4	+ 73 08		15.6		
8 48.4	+ 73 41	520*	11.9		

Position α 1950 h m	Position δ o '	NGC IC*	m_p	V_s km/sec	Remarks
8 48.7	+ 68 40		14.8		
8 50.3	+ 72 54		15.3		
8 50.6	+ 73 59		15.7		diffuse
8 51.6	+ 68 28		15.5		
8 52.8	+ 68 27		15.7		
8 57.5	+ 73 30		15.4		
8 59.1	+ 69 42		15.2		
9 07.0	+ 73 47		14.8		
9 08.5	+ 69 20		15.6		double system
9 09.4	+ 74 26		14.4		diffuse spiral
9 09.8	+ 74 20		15.7		
9 11.8	+ 70 05		15.7		
9 13.3	+ 73 57	529*	12.0		
9 13.8	+ 70 01		14.8		
9 14.0	+ 71 56		15.1		
9 14.8	+ 69 25	2787	11.7	+ 595	m_H = 12.1 SBa
9 16.8	+ 69 37		15.7		
9 17.0	+ 71 45		14.7		
9 17.0	+ 71 54		15.4		
9 17.3	+ 72 03	2810	13.4		
9 18.5	+ 72 16		14.9		
9 19.7	+ 68 47		14.6		
9 20.5	+ 74 07		15.3		
9 20.8	+ 68 37		15.4		diffuse
9 23.6	+ 68 39		13.9		
9 23.8	+ 68 40		14.3		
9 26.2	+ 74 01		14.2		
9 27.1	+ 69 59		15.5		double system, connected
9 31.0	+ 74 13		15.7		
9 32.5	+ 73 36		15.6		very diffuse
9 33.9	+ 69 04		15.7		
9 36.0	+ 71 25		15.5		extremely diffuse Irr.
9 37.5	+ 68 37		15.2		
9 38.1	+ 68 38		15.6		
9 39.8	+ 72 29		15.7		
9 41.0	+ 68 49	2959	13.7		
9 41.1	+ 72 16		15.7		diffuse spiral
9 41.2	+ 68 50		15.6		
9 42.7	+ 73 13	2957	15.3		double system
9 43.2	+ 73 12	2963	14.3		
9 45.0	+ 69 39		15.6		
9 45.8	+ 72 31	2985	11.1	+ 1277	m_H = 11.8 Sb
9 51.2	+ 72 27	3027	12.3	+ 1079	

MAGNITUDES AND TYPES FROM OTHER SOURCES

NGC IC*	Bigay 1951		Pettit 1954		Humason, Mayall, Sandage 1956		Holmberg 1958	
2633	-	-	13.00	SBc	12.8	SBb	-	-
2646	-	-	13.32	SB0	13.1	SB0	-	-
2787	11.75	SBa	12.01	SBa	11.7	SBa	-	-
2985	11.05	Sb	11.36	Sb	11.2	Sb	11.11	Sb+
3027	-	-	-	-	-	Sc	12.31	Sc+
529*	-	-	-	-	-	-	12.54	Sc-
2389*	-	-	14.02	SB0	13.9	SB0	-	-





FIELD No. 333

10^h20^m $+71^\circ30'$

Survey Plate No. 685

GC STARS

Nos.	R.A.	Decl.	m_p
	h m s	° ′ ″	
13684	9 53 57.5	+ 73 07 07	5.96
14102	10 13 51.2	+ 71 18 41	6.58
14180	10 17 16.5	+ 68 59 59	5.84
14424	10 27 21.2	+ 73 35 16	7.14
14682	10 38 16.6	+ 68 42 19	5.90
14954	10 50 07.1	+ 70 07 15	6.08

CLUSTERS OF GALAXIES

Cluster	Character	Population	Diameter in cm	Distance	Number on chart
0923.9 + 7353	medium compact	348	11.7	Near	4
0941.7 + 7307	medium compact	104	2.0	ED	7
0947.9 + 7338	open	134	2.2	VD	3
0949.4 + 7125	medium compact	104	1.7	VD	26
0949.7 + 7107	compact	94	1.1	ED	27
0950.5 + 6820	medium compact	76	2.2	VD	29
0951.3 + 7155	medium compact	79	1.3	ED	25
0952.0 + 7312	compact	75	1.1	ED	5
0953.1 + 7406	compact	63	1.1	ED	24
0957.4 + 7450	open	140	6.7	MD	1
0959.3 + 6810	medium compact	154	3.2	D	30
1001.7 + 7351	medium compact	50	1.0	ED	22
1002.7 + 6848	compact	69	0.9	ED	23
1004.7 + 7128	compact	78	1.3	ED	21
1006.6 + 7115	compact	103	1.7	ED	20
1014.5 + 6904	open	86	1.3	ED	19
1015.4 + 7405	medium compact	54	0.9	ED	18
1015.9 + 7035	compact	83	1.7	ED	17
1017.2 + 6829	compact	139	2.1	ED	16
1020.0 + 7323	medium compact	43	0.8	ED	6
1020.8 + 7021	medium compact	53	1.0	ED	15
1021.0 + 7728	open	765	32.2	Near	2
1023.7 + 6826	medium compact	65	1.2	ED	14
1033.5 + 6823	medium compact	145	3.1	VD	32
1034.7 + 7116	medium compact	86	1.5	ED	13
1035.1 + 7226	open	235	16.7	Near	10
1039.7 + 6828	compact	67	0.8	ED	31
1041.2 + 7137	medium compact	103	1.7	VD	12
1048.6 + 6925	open	82	1.7	ED	11
1052.4 + 7201	compact	240	3.6	ED	9
1056.4 + 7125	medium compact	57	1.4	ED	8
1112.7 + 7259	open	136	10.7	Near	28

Average number of galaxies per cluster = 128.4

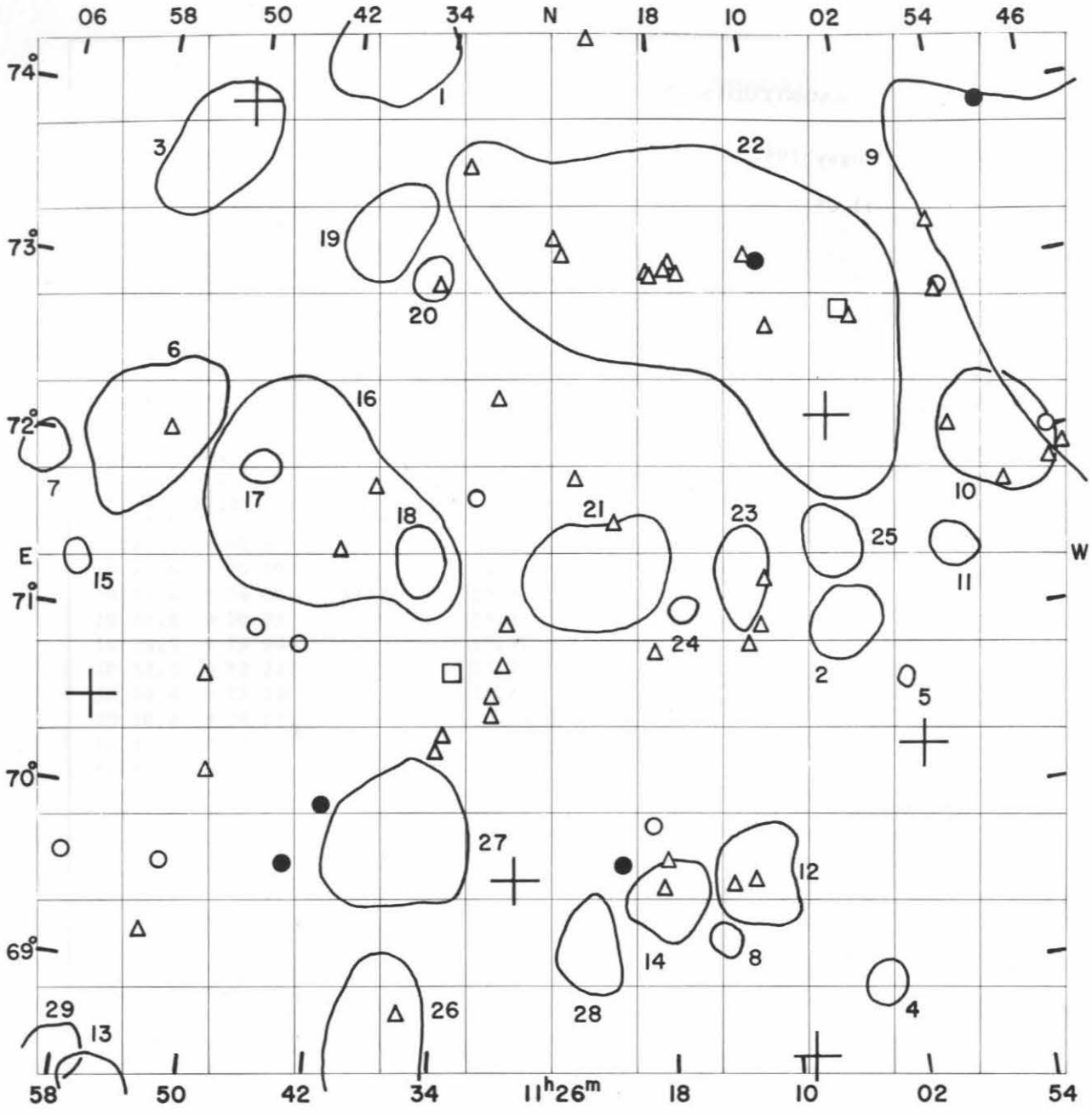
GALAXIES

Position α 1950 h m	Position δ 1950 ° ′	NGC IC*	m_p	V_s km/sec	Remarks
9 41.1	+ 72 16		15.7		diffuse spiral
9 42.7	+ 73 13	2957	15.3		double system
9 43.2	+ 73 12	2963	14.3		
9 45.8	+ 72 31	2985	11.1	+ 1277	m_H = 11.8 Sb
9 50.3	+ 68 34		15.1		diffuse spiral
9 51.2	+ 72 27	3027	12.3	+ 1079	
9 51.4	+ 69 18	3031	8.1	- 59	m_H = 8.9 Sb
9 51.7	+ 69 55	3034	9.2	+ 269	m_H = 9.4 I
9 57.1	+ 71 14		15.6		
9 57.6	+ 72 25	3065	12.9	+ 2051	m_H = 12.9 E
9 57.9	+ 72 22	3066	12.8	+ 2132	
9 58.4	+ 70 59		15.2		
9 59.4	+ 68 58	3077	10.7	- 158	m_H = 11.4 I
10 00.9	+ 72 26		14.5		
10 01.0	+ 70 48		15.0		double system
10 01.2	+ 70 35		15.7		

Position α 1950 h m	δ ° ′	NGC IC*	m_p	V_s km/sec	Remarks
10 01.4	+ 70 37		15.3		
10 04.0	+ 68 36		15.3		
10 10.3	+ 69 22		15.4		
10 11.2	+ 74 29	3144=3174	14.3		
10 12.0	+ 72 48		15.7		
10 12.7	+ 73 38	3147	11.3	+ 2721	m_H = 11.9 Sc
10 17.5	+ 74 26	3183=3218	12.5		
10 19.1	+ 70 52		15.7		
10 20.1	+ 71 08		14.8		
10 20.2	+ 68 38		15.5		
10 21.7	+ 70 20		14.7		double system, connected
10 22.0	+ 71 27		15.6		
10 22.1	+ 70 33		15.7		
10 24.4	+ 71 21		15.7		
10 24.8	+ 68 40	2574*	11.2	+ 28	
10 26.1	+ 69 20		15.3		
10 26.6	+ 70 19		14.6		disrupted chain of galaxies
10 26.6	+ 74 08	3252	15.4		
10 26.8	+ 70 53		15.1		diffuse spiral
10 26.9	+ 73 04		15.7		
10 27.3	+ 72 22		15.2		
10 30.4	+ 73 16		15.6		
10 30.4	+ 74 01		14.2		
10 31.6	+ 72 55		15.4		
10 32.0	+ 72 51		14.9		
10 33.7	+ 72 16		15.4		triple system
10 33.9	+ 69 05		15.1		
10 34.4	+ 72 28		15.5		
10 37.0	+ 70 12		15.5		
10 37.0	+ 70 58		15.6		
10 40.3	+ 70 01		14.6		double system
10 40.3	+ 70 38		15.4		compact
10 40.5	+ 70 40		15.5		
10 41.0	+ 69 20		15.5		
10 42.3	+ 73 37	3343	14.7		
10 42.9	+ 72 34	2600*	15.6		
10 43.4	+ 72 34	2601*	15.5		double system
10 43.4	+ 73 06	3348	12.0	+ 2855	m_H = 12.1 E
10 43.6	+ 69 07		15.7		
10 44.7	+ 72 40	3364	13.8		
10 47.4	+ 71 55		15.6		
10 48.0	+ 69 45		15.6		compact
10 48.1	+ 68 58		14.8		
10 48.4	+ 72 02		14.4		
10 48.5	+ 71 50		15.5		
10 50.0	+ 73 57	3403	13.3	+ 1244	m_H = 12.9 S
10 52.1	+ 71 45		15.4		very faint streamers
10 55.3	+ 72 54		14.6		
10 55.3	+ 73 18		15.6		very diffuse spiral
10 55.4	+ 72 53		15.7		
10 55.7	+ 72 06		15.6		compact

MAGNITUDES AND TYPES FROM OTHER SOURCES

NGC IC*	Bigay 1951		Pettit 1954		Humason, Mayall, Sandage 1956		Holmberg 1958	
2985	11.05	Sb	11.36	Sb	11.2	Sb	11.11	Sb+
3027	-	-	-	-	-	Sc	12.31	Sc+
3031	7.9	Sb	8.43	Sb	7.8	Sb	7.85	Sb-
3034	8.9	Irr.	9.45	Irr.	-	Irr.	9.20	Ir. II
3065	11.6	E	13.52	S0	12.9	S0	-	-
3066	-	-	13.58	Sb	13.5	Sb	-	-
3077	10.6	Irr.	11.28	Irr.	10.9	Irr.	10.57	Ir. II
3147	11.15	Sc	11.58	Sb	11.4	Sb	-	-
3183	-	-	-	-	-	-	12.59	Sb+
3348	11.8	E	-	-	12.0	E0	-	-
3364	-	-	-	-	-	-	13.40	Sc-
3403	-	-	-	-	-	Sc	-	-
2574*	-	-	-	-	-	Irr.	10.91	Ir. I



FIELD No. 334

11^h26^m $+71^\circ30'$

Survey Plate No. 714

GC STARS

Nos.	R.A.	Decl.	m_p
	h m s	o ' "	
15177	11 00 06.9	+ 70 18 02	6.64
15304	11 05 00.6	+ 72 13 48	6.87
15378	11 09 00.9	+ 68 32 37	6.42
15799	11 28 27.5	+ 69 36 26	4.06
16266	11 51 02.1	+ 74 02 08	6.78
16424	11 58 18.6	+ 70 30 57	6.69

CLUSTERS OF GALAXIES

Cluster	Character	Population	Diameter in cm	Distance	Number on chart
1035.1 + 7226	open	235	16.7	Near	9
1052.4 + 7201	compact	240	3.6	ED	10
1056.4 + 7125	medium compact	57	1.4	ED	11
1100.8 + 7042	medium compact	39	0.5	ED	5
1104.2 + 6857	medium compact	68	1.3	VD	4
1104.9 + 7102	open	126	2.2	ED	2
1105.3 + 7130	medium compact	90	2.0	VD	25
1112.0 + 6937	compact	144	2.9	D	12
1112.0 + 7121	open	86	2.3	ED	23
1112.7 + 7259	open	136	10.7	Near	22
1114.4 + 6916	compact	45	1.0	ED	8
1116.6 + 7110	medium compact	45	0.8	ED	24
1118.0 + 6930	medium compact	89	2.5	VD	14
1122.7 + 7122	compact	215	4.1	VD	21
1123.2 + 6913	medium compact	73	2.4	VD	28
1135.5 + 7125	medium compact	106	1.8	ED	18
1135.8 + 7303	open	86	1.3	ED	20
1136.7 + 6950	medium compact	96	4.5	MD	27
1137.4 + 6842	open	105	4.0	D	26
1139.6 + 7317	open	138	2.8	VD	19
1139.7 + 7423	medium compact	93	3.6	D	1
1143.8 + 7142	medium compact	268	7.1	D	16
1148.2 + 7155	open	50	1.1	ED	17
1153.8 + 7343	medium compact	149	3.8	D	3
1155.2 + 6817	medium compact	121	2.0	D	13
1156.2 + 7202	open	121	4.5	D	6
1158.0 + 6823	compact	86	2.0	VD	29
1200.6 + 7117	compact	52	0.9	ED	15
1204.3 + 7153	compact	70	1.5	ED	7

Average number of galaxies per cluster = 111.3

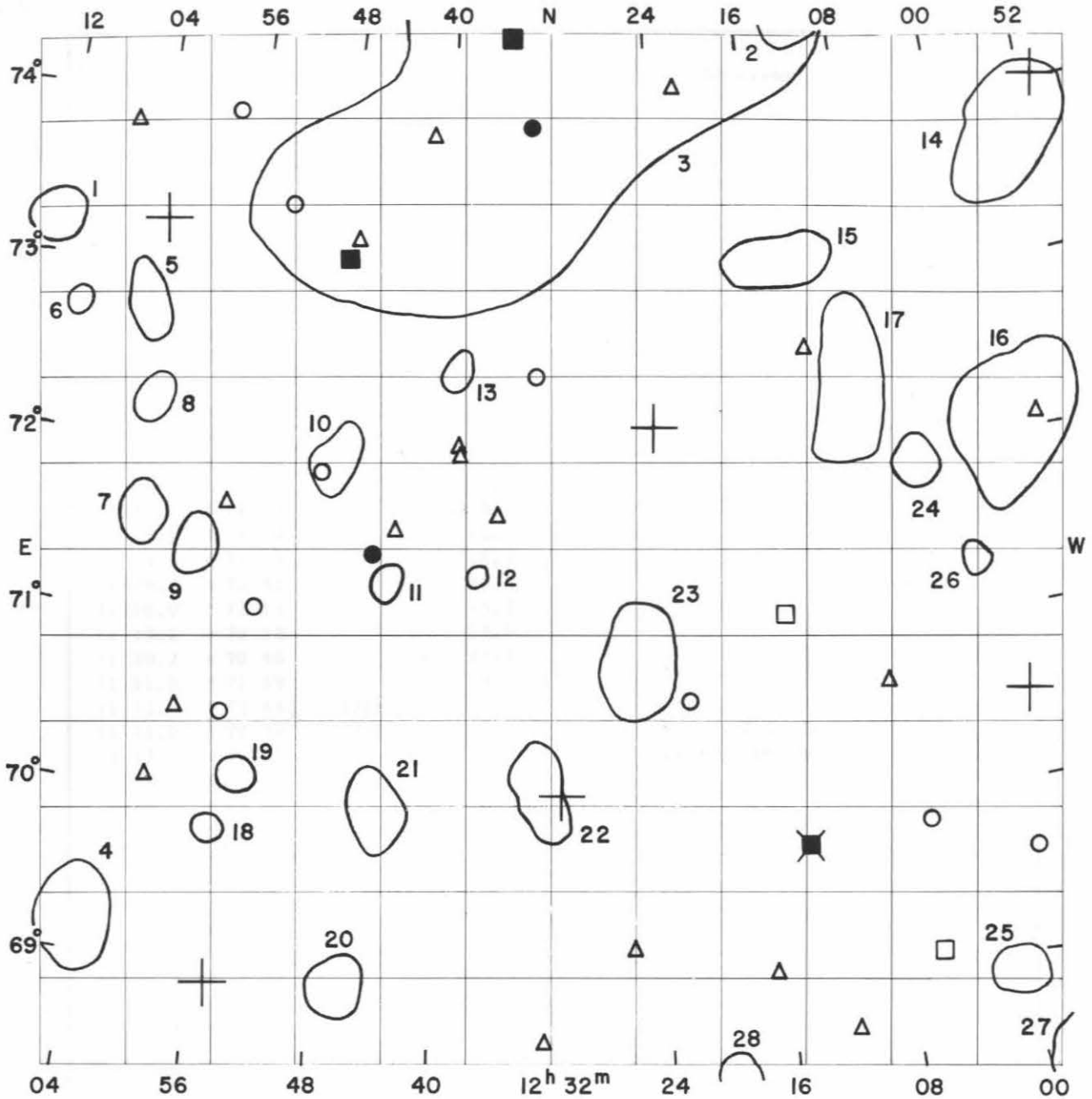
GALAXIES

Position α 1950 h m	Position δ o '	NGC IC*	m_p	V_s km/sec	Remarks
10 47.4	+ 71 55		15.6		
10 48.4	+ 72 02		14.4		
10 48.5	+ 71 50		15.5		
10 50.0	+ 73 57	3403	13.3	+ 1244	m_H = 12.9 S
10 52.1	+ 71 45		15.4		very faint streamers
10 55.3	+ 72 54		14.6		
10 55.3	+ 73 18		15.6		very diffuse spiral
10 55.4	+ 72 53		15.7		
10 55.7	+ 72 06		15.6		compact
11 02.5	+ 72 46		15.4		
11 03.3	+ 72 49	3516	12.3	+ 2623	m_H = 12.2 Sa
11 09.1	+ 72 45		15.5		
11 09.5	+ 73 09	3562	13.2		
11 10.4	+ 71 20		15.7		
11 10.6	+ 73 11		15.6		
11 10.8	+ 71 04		15.7		
11 11.8	+ 70 56		15.7		
11 12.1	+ 69 35		15.5		

Position α 1950 h m	Position δ o '	NGC IC*	m_p	V_s km/sec	Remarks
11 13.6	+ 69 35		15.7		
11 16.0	+ 73 05		15.5		compact
11 16.6	+ 73 09		15.4		
11 17.0	+ 73 07		15.7		
11 18.0	+ 69 44		15.2		
11 18.0	+ 73 05		15.5		double system
11 18.3	+ 73 06		15.3		double system, halo
11 18.4	+ 69 34		15.4		
11 18.6	+ 70 55		15.4		
11 19.0	+ 69 55		14.7		
11 21.1	+ 69 42	3654	13.4		
11 21.3	+ 71 40		15.7		
11 23.0	+ 74 28		15.6		
11 24.2	+ 71 55		15.7		very compact
11 25.1	+ 73 13		15.3		
11 25.7	+ 73 18		15.2		
11 29.1	+ 71 05		15.2		chain of 6 galaxies
11 29.4	+ 70 51		15.7		
11 30.0	+ 72 23		15.1		
11 30.2	+ 70 34		15.6		
11 30.2	+ 70 40		15.3		
11 31.5	+ 71 49		14.3		
11 32.6	+ 73 44	3736	15.6		
11 33.0	+ 70 48	3735	12.4		m_H = 12.6 Sc
11 33.5	+ 70 27		15.5		extremely compact
11 34.0	+ 70 22		15.7		
11 34.7	+ 73 02		15.3		
11 36.1	+ 68 50		15.4		
11 38.8	+ 71 50		15.2		double system, faint bridge
11 41.2	+ 71 30		15.1		
11 41.7	+ 70 01		13.8		
11 44.0	+ 70 57		14.8		
11 44.1	+ 69 40	3879	13.5		
11 47.2	+ 71 01		14.9		
11 49.8	+ 70 10		15.5		
11 50.5	+ 70 43		15.3		
11 52.4	+ 69 36	3961	14.7		
11 53.2	+ 69 12		15.6		
11 54.7	+ 72 06		15.5		
11 58.9	+ 69 37	4043	14.5		

MAGNITUDES AND TYPES FROM OTHER SOURCES

NGC IC*	Bigay 1951		Pettit 1954		Humason, Mayall, Sandage 1956		Holmberg 1958	
3403	-	-	-	-	-	Sc	-	-
3516	-	-	12.73	SB0	12.7	SB0	-	-



FIELD No. 335

12^h32^m $+71^\circ30'$

Survey Plate No. 1411

GC STARS

Nos.	R.A.	Decl.	m_p
	h m s	° ' "	
16266	11 51 02.1	+ 74 02 08	6.78
16424	11 58 18.6	+ 70 30 57	6.69
16960	12 24 14.4	+ 72 12 24	6.44
17126	12 31 21.6	+ 70 03 49	3.88
17581	12 54 48.1	+ 68 53 13	7.36
17748	13 03 17.1	+ 73 17 33	6.33

CLUSTERS OF GALAXIES

Cluster	Character	Population	Diameter in cm	Distance	Number on chart
1153.8 + 7343	medium compact	149	3.8	D	14
1156.2 + 7202	open	121	4.5	D	16
1158.0 + 6823	compact	86	2.0	VD	27
1200.6 + 7117	compact	52	0.9	ED	26
1201.1 + 6854	medium compact	89	1.7	ED	25
1204.3 + 7153	compact	70	1.5	ED	24
1208.6 + 7221	open	122	3.6	VD	17
1209.9 + 7440	medium compact	101	2.9	D	2
1213.9 + 7307	medium compact	72	2.4	VD	15
1219.7 + 6821	medium compact	71	1.5	ED	28
1225.8 + 7050	medium compact	113	2.9	D	23
1230.3 + 7450	open	207	17.6	Near	3
1232.7 + 7005	medium compact	115	2.2	D	22
1237.4 + 7120	compact	35	0.6	ED	12
1239.3 + 7231	open	62	1.1	ED	13
1244.0 + 7116	medium compact	50	1.1	ED	11
1244.1 + 6958	medium compact	70	2.0	VD	21
1246.2 + 6855	compact	119	1.9	VD	20
1248.1 + 7157	medium compact	106	1.8	VD	10
1253.7 + 7006	compact	72	1.2	ED	19
1255.4 + 6946	compact	45	0.9	ED	18
1258.2 + 7125	open	90	1.6	ED	9
1302.4 + 7134	open	96	1.7	ED	7
1302.5 + 7214	medium compact	93	1.4	ED	8
1303.5 + 6910	medium compact	145	2.9	VD	4
1304.0 + 7245	medium compact	89	1.8	ED	5
1309.2 + 7244	medium compact	53	0.9	ED	6
1312.1 + 7311	medium compact	111	1.8	ED	1

Average number of galaxies per cluster = 93.0

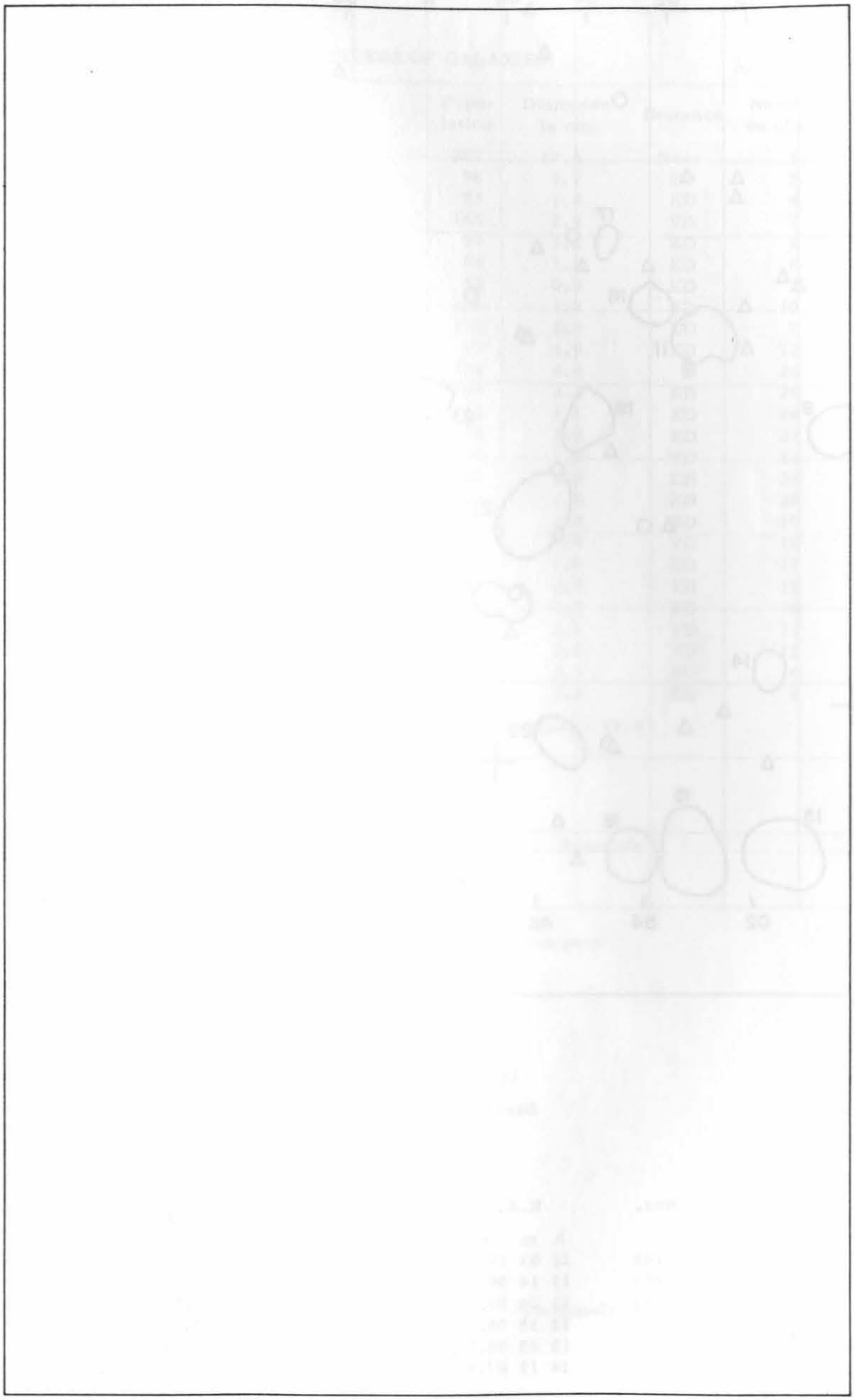
GALAXIES

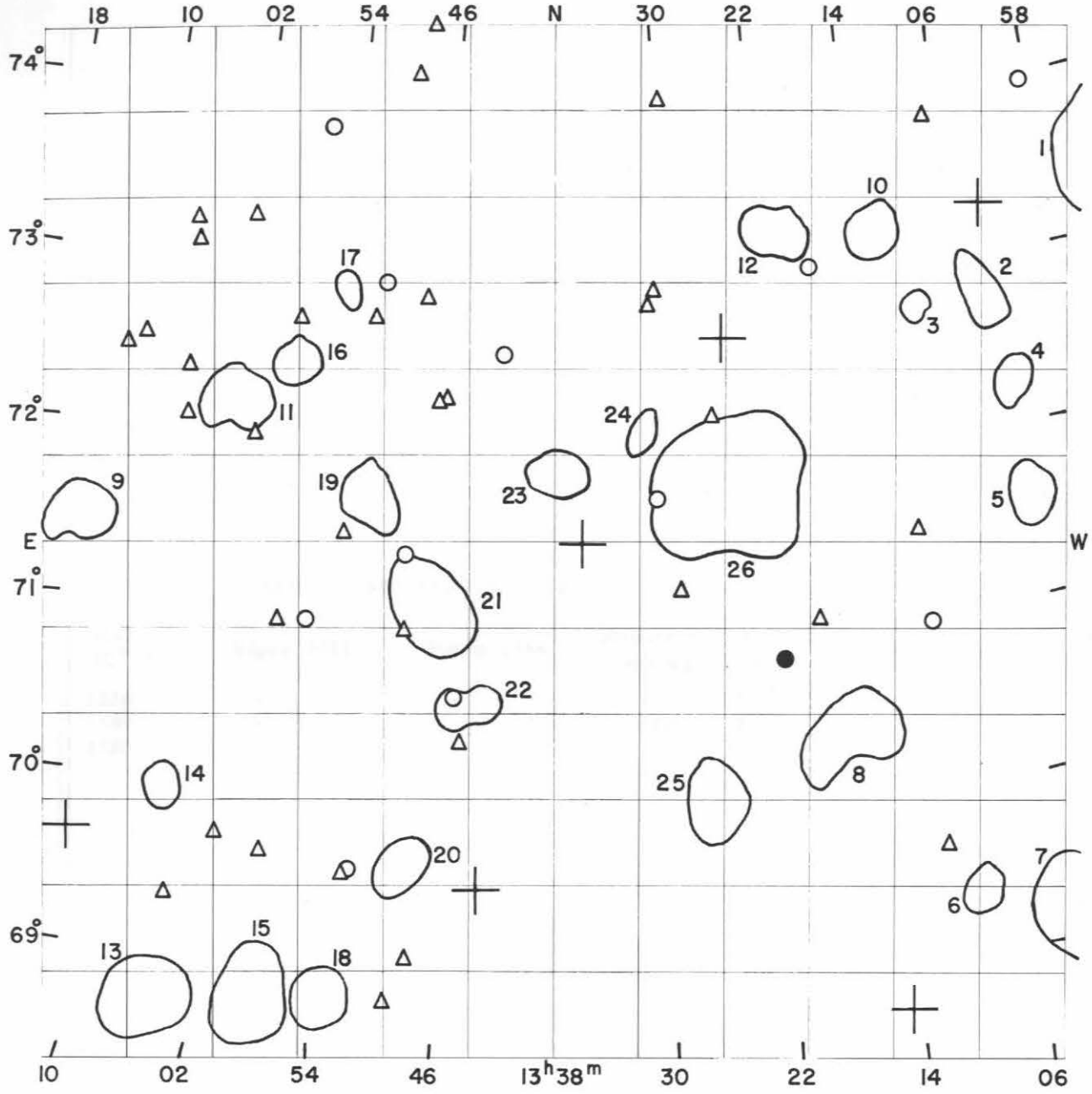
Position α 1950 h m	Position δ o '	NGC IC*	m_p	V_s km/sec	Remarks
11 54.7	+ 72 06		15.5		
11 58.9	+ 69 37	4043	14.5		
12 06.0	+ 69 03		12.7		
12 06.0	+ 69 50	4120	14.1		
12 08.0	+ 70 40		15.4		
12 12.0	+ 68 40		15.4		multiple system
12 12.2	+ 72 37		15.7		double system
12 14.4	+ 69 45	4236	10.7	+ 27	m_H = 11.3 Sc
12 15.1	+ 71 05	4250	13.0		
12 17.1	+ 69 00		15.7		compact
12 21.9	+ 74 10		15.7		
12 22.1	+ 70 37		14.6		very diffuse spiral
12 26.4	+ 69 10		15.6		
12 32.5	+ 68 38		15.6		
12 33.1	+ 72 30		14.3		
12 33.4	+ 73 57		13.5		
12 35.4	+ 74 28	4589	12.0	+ 1825	m_H = 12.1 E
12 36.1	+ 71 42		15.5		
12 38.9	+ 72 03		15.4		

Position α 1950 h m	Position δ o '	NGC IC*	m_p	V_s km/sec	Remarks
12 39.0	+ 72 05		15.5		
12 41.7	+ 73 54		15.3		
12 43.7	+ 71 36		15.3		very compact
12 45.2	+ 71 28	4693	14.0		
12 47.6	+ 73 16		15.6		
12 48.2	+ 73 09	4750	11.8	+ 1647	m_H = 12.2 Sb
12 49.3	+ 71 55	4749	14.2		
12 53.2	+ 73 28		14.4		
12 53.7	+ 71 06		14.9		compact
12 55.4	+ 70 28	4857	14.7		
12 56.4	+ 71 42		15.2		
12 58.3	+ 73 58		14.7		
12 58.8	+ 70 28		15.3		
13 00.2	+ 70 04		15.6		
13 06.9	+ 73 50		15.5		compact

MAGNITUDES AND TYPES FROM OTHER SOURCES

NGC IC*	Bigay 1951		Pettit 1954		Humason, Mayall, Sandage 1956		Holmberg 1958	
4236	-	-	-	-	-	Sc	10.05	Sc+
4589	-	-	-	-	12.0	E1	-	-
4750	-	-	-	-	-	Sb	-	-





FIELD No. 336

13^h38^m $+71^\circ30'$

Survey Plate No. 1341

GC STARS

Nos.	R.A.	Decl.	m_p
	h m s	o ' "	
17748	13 03 17.1	+ 73 17 33	6.33
17991	13 14 50.1	+ 68 40 16	6.11
18183	13 24 51.4	+ 72 39 03	6.07
18445	13 35 58.7	+ 71 29 47	5.67
18601	13 43 08.7	+ 69 28 13	8.14
19189	14 11 07.9	+ 69 40 01	5.36

CLUSTERS OF GALAXIES

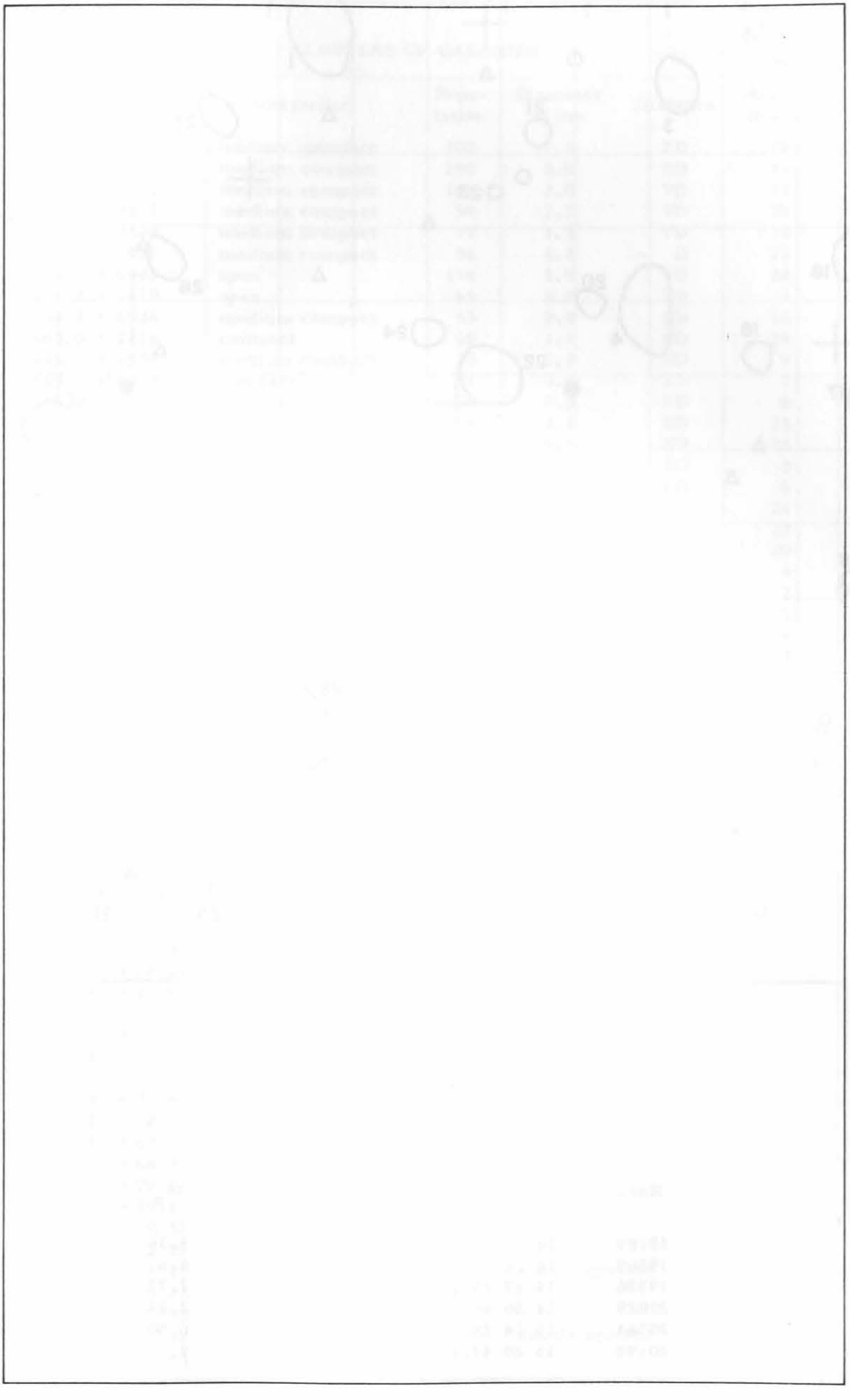
Cluster	Character	Population	Diameter in cm	Distance	Number on chart
1230.3 + 7450	open	207	17.6	Near	1
1302.4 + 7134	open	96	1.7	ED	5
1302.5 + 7214	medium compact	93	1.4	ED	4
1303.5 + 6910	medium compact	145	2.9	VD	7
1304.0 + 7245	medium compact	89	1.8	ED	2
1309.1 + 6920	medium compact	56	1.3	ED	6
1309.2 + 7244	medium compact	53	0.9	ED	3
1312.1 + 7311	medium compact	111	1.8	ED	10
1317.3 + 7018	compact	211	2.8	ED	8
1320.0 + 7314	medium compact	95	1.9	ED	12
1324.9 + 7146	medium compact	136	4.8	D	26
1327.0 + 6958	medium compact	105	2.2	ED	25
1331.2 + 7206	compact	53	1.1	ED	24
1337.8 + 7151	medium compact	78	1.6	ED	23
1344.1 + 7031	medium compact	57	1.6	VD	22
1346.7 + 7105	medium compact	90	2.8	ED	21
1348.4 + 6935	medium compact	87	1.6	ED	20
1351.9 + 7143	medium compact	71	1.9	ED	19
1353.3 + 6848	compact	78	1.9	VD	18
1354.2 + 7254	compact	68	1.0	ED	17
1358.0 + 6846	medium compact	63	2.8	ED	15
1358.0 + 7228	open	80	1.5	ED	16
1402.4 + 7212	open	92	2.1	VD	11
1404.6 + 6843	medium compact	130	2.8	VD	13
1405.1 + 6957	compact	54	1.3	ED	14
1413.0 + 7129	medium compact	198	2.0	ED	9

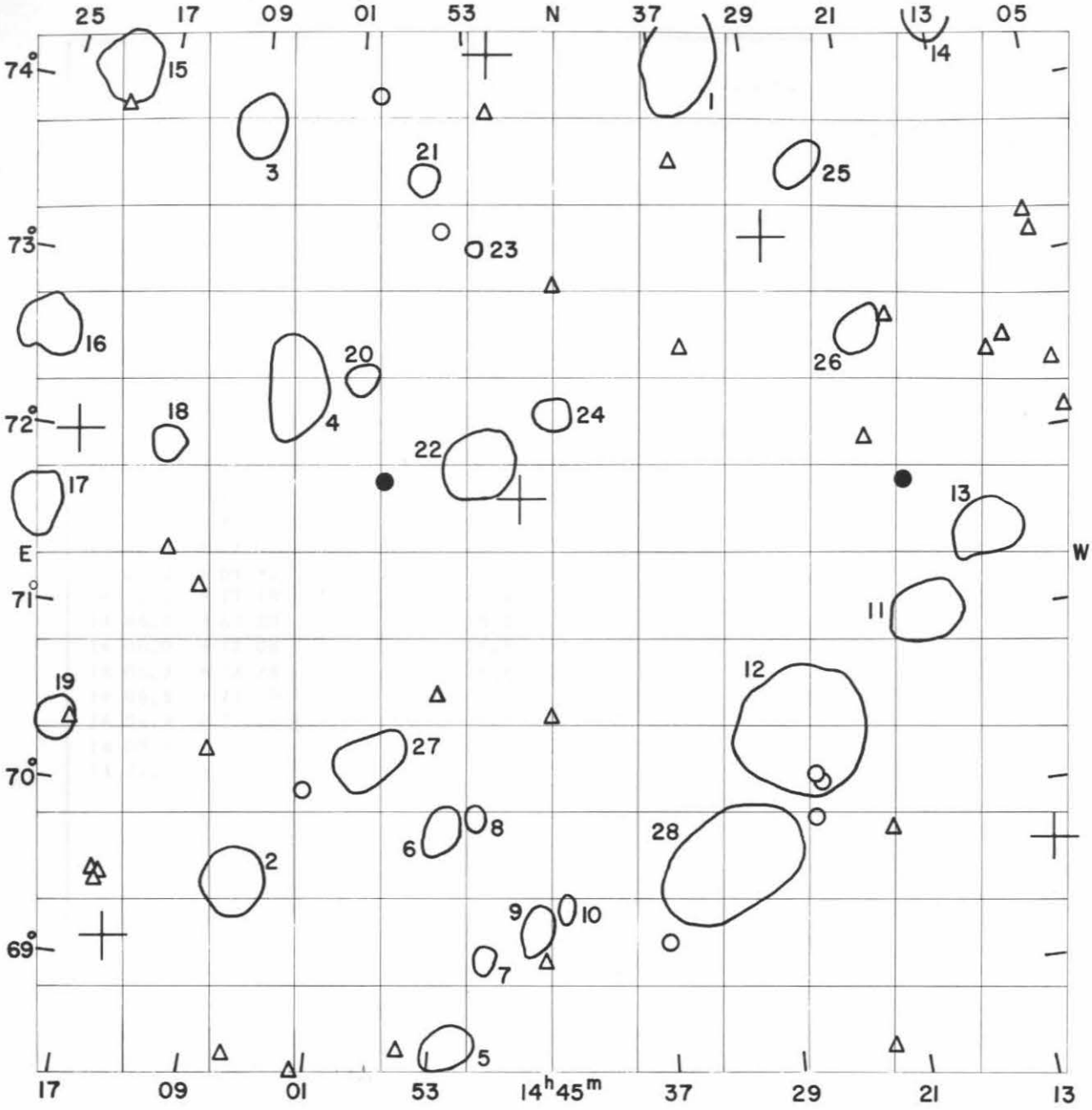
Average number of galaxies per cluster = 99.8

GALAXIES

Position α 1950 h m	Position δ 1950 o '	NGC IC*	m_p	V_s km/sec	Remarks
12 58.3	+ 73 58		14.7		
13 06.9	+ 73 50		15.5		compact
13 10.6	+ 70 55	5034	14.1		
13 11.0	+ 71 28		15.4		
13 11.2	+ 69 38		15.3		
13 17.4	+ 73 02		14.8		
13 18.8	+ 71 00		15.5		
13 21.4	+ 70 47	5144	13.2		
13 26.0	+ 72 12		15.7		
13 28.8	+ 71 12		15.7		
13 29.2	+ 74 02		15.6		
13 30.0	+ 72 56		15.3		
13 30.3	+ 71 44		14.4		
13 30.6	+ 72 51		15.4		
13 42.0	+ 72 34		15.0		
13 44.6	+ 70 20		15.6		
13 45.0	+ 70 35	5314	14.6		
13 46.1	+ 72 18		15.1		
13 46.8	+ 72 17	945*	15.7		extremely faint jets
13 47.8	+ 69 04		15.3		
13 48.0	+ 74 30		15.1		

Position α 1950 h m	Position δ o '	NGC IC*	m_p	V_s km/sec	Remarks
13 48.1	+ 72 53	5340	15.2		
13 48.8	+ 70 58		15.4		
13 48.9	+ 71 25	954*	14.5		double nucleus
13 49.1	+ 68 49		15.5		
13 49.2	+ 74 12	5344	15.4		double system
13 51.3	+ 72 58		14.8		
13 51.8	+ 69 34		14.5		
13 52.1	+ 72 46		15.6		
13 52.2	+ 69 33		15.7		
13 53.6	+ 71 31		15.3		
13 56.0	+ 71 00	5415	15.0		
13 56.7	+ 73 50	5412	14.7		
13 58.0	+ 69 39		15.2		
13 58.0	+ 70 59		15.6		
13 58.1	+ 72 44		15.7		
14 00.8	+ 72 02		15.7		
14 01.0	+ 69 43		15.5		
14 02.2	+ 73 19		15.6		
14 04.0	+ 69 20		15.6		
14 06.0	+ 72 08		15.5		very fine filaments
14 06.3	+ 72 25		15.2		
14 06.5	+ 73 09		15.6		extremely compact
14 06.9	+ 73 16		15.5		
14 09.8	+ 72 34		15.7		
14 11.2	+ 72 31		15.1		





FIELD No. 337

14^h45^m $+71^\circ30'$

Survey Plate No. 1442

GC STARS

Nos.	R.A.	Decl.	m_p
	h m s	o ' "	
19189	14 11 07.9	+ 69 40 01	5.36
19569	14 28 11.1	+ 73 16 38	8.6
19956	14 47 25.7	+ 71 48 31	7.77
20029	14 50 49.7	+ 74 21 35	2.24
20544	15 14 28.9	+ 69 07 45	6.50
20692	15 20 47.4	+ 72 00 43	3.14

CLUSTERS OF GALAXIES

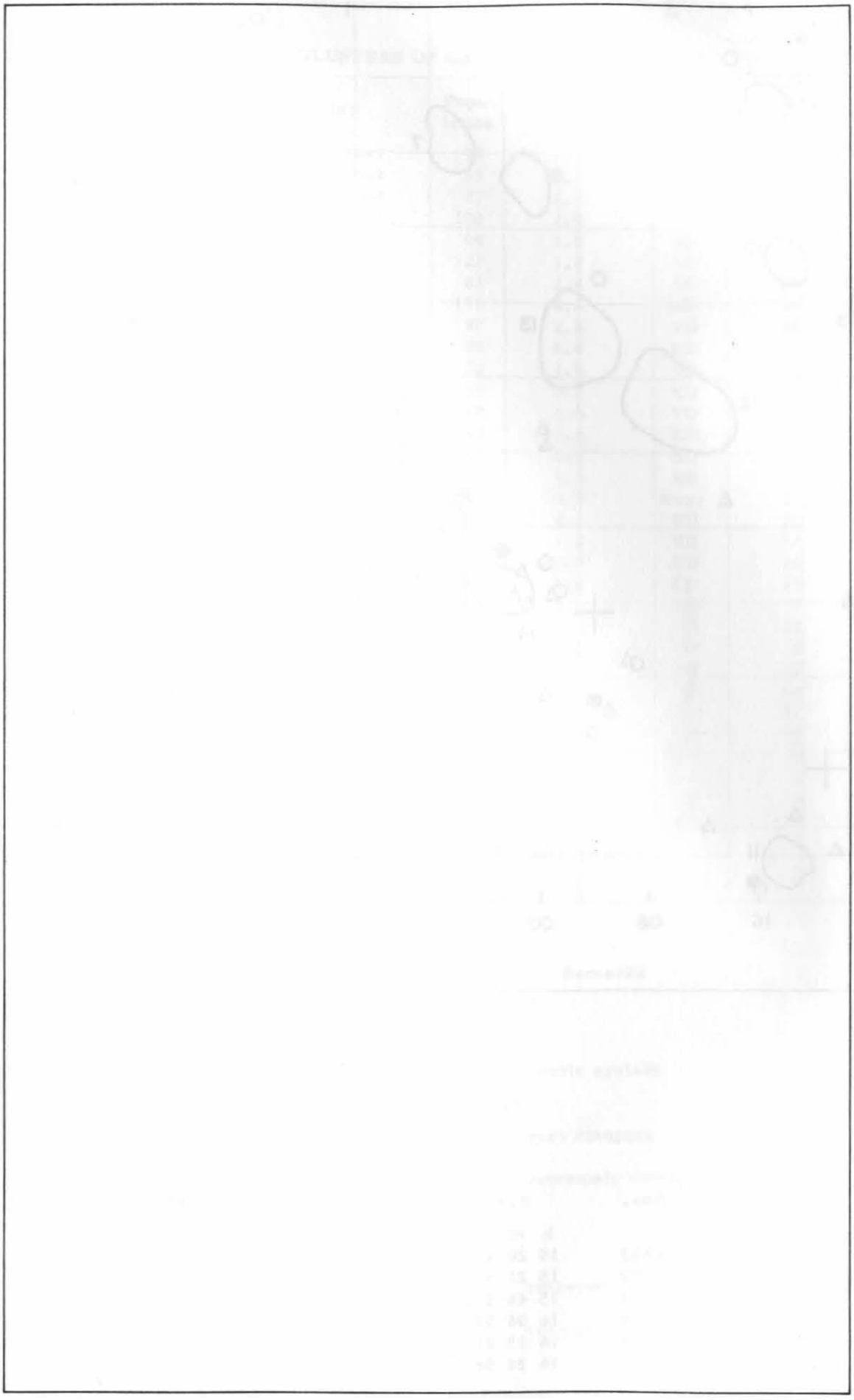
Cluster	Character	Population	Diameter in cm	Distance	Number on chart
1412.4 + 7428	medium compact	100	1.6	ED	14
1413.0 + 7129	medium compact	198	2.0	ED	13
1418.1 + 7102	medium compact	103	2.0	VD	11
1421.1 + 7241	medium compact	90	1.3	VD	26
1424.9 + 7340	medium compact	77	1.3	VD	25
1427.6 + 7026	medium compact	96	4.1	D	12
1432.8 + 6940	open	114	3.9	VD	28
1434.3 + 7419	open	63	2.8	VD	1
1444.1 + 6926	medium compact	55	0.8	ED	10
1445.0 + 7216	compact	60	1.1	ED	24
1446.0 + 6920	medium compact	75	1.3	ED	9
1449.6 + 6909	compact	51	0.9	ED	7
1450.3 + 6958	compact	50	0.8	ED	8
1450.6 + 7159	open	98	2.1	ED	22
1451.2 + 7313	compact	45	0.4	ED	23
1451.9 + 6838	compact	105	1.5	ED	5
1452.6 + 6953	medium compact	62	1.3	ED	6
1455.7 + 7336	compact	48	1.0	ED	21
1457.7 + 7016	open	112	1.9	ED	27
1459.7 + 7227	compact	47	1.0	ED	20
1504.9 + 7223	open	94	2.4	VD	4
1506.5 + 6931	medium compact	89	2.0	ED	2
1509.5 + 7351	medium compact	97	1.7	ED	3
1514.0 + 7159	medium compact	53	1.1	ED	18
1519.5 + 7020	medium compact	77	1.3	ED	19
1520.9 + 7407	medium compact	108	2.0	VD	15
1523.2 + 7132	open	64	1.8	ED	17
1524.3 + 7233	medium compact	122	1.8	ED	16

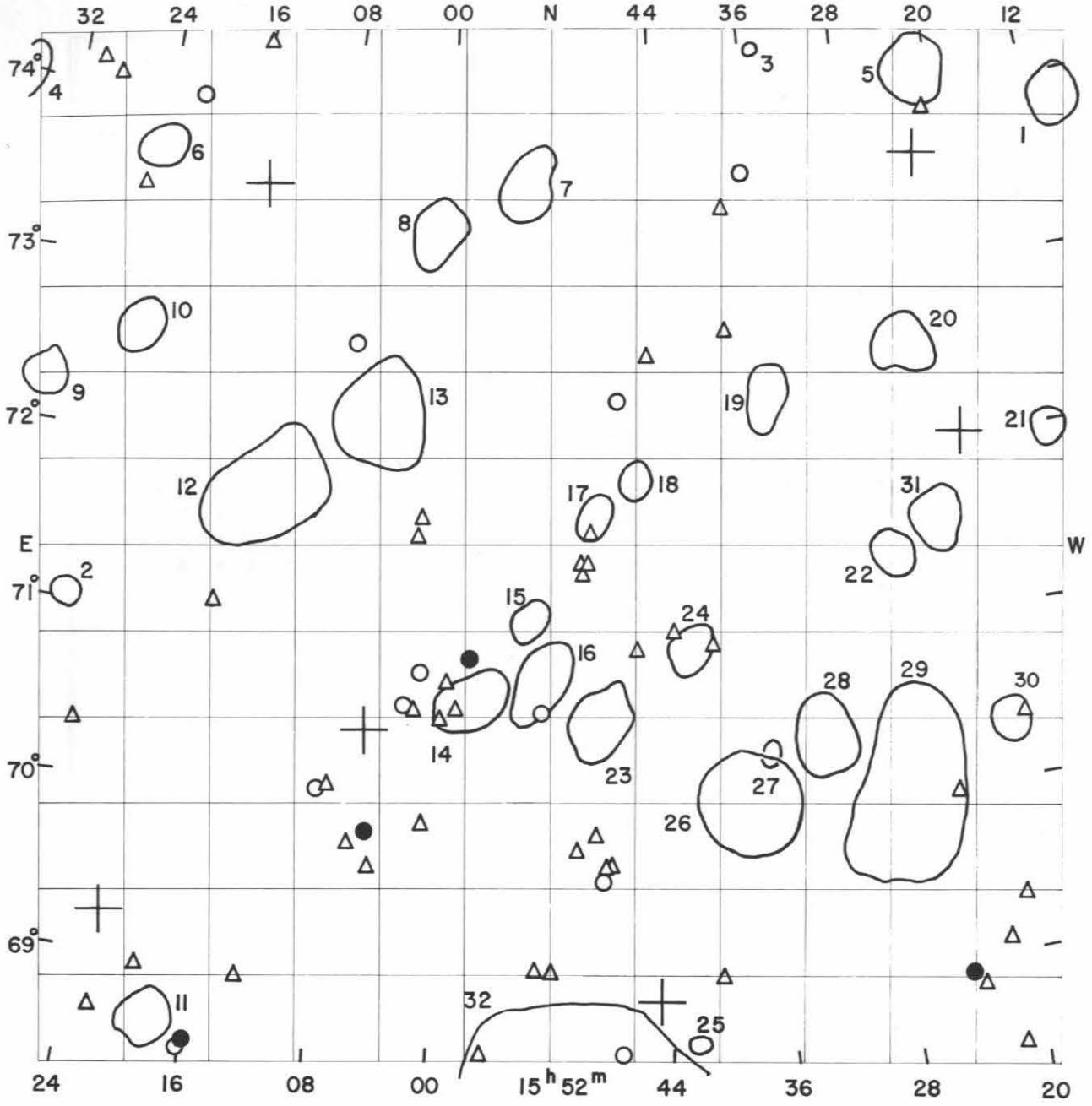
Average number of galaxies per cluster = 130.7

GALAXIES

Position α 1950 h m	Position δ o '	NGC IC*	m_p	V_s km/sec	Remarks
14 06.0	+ 72 08		15.5		very fine filaments
14 06.3	+ 72 25		15.2		
14 06.5	+ 73 09		15.6		extremely compact
14 06.9	+ 73 16		15.5		
14 09.8	+ 72 34		15.7		
14 11.2	+ 72 31		15.1		
14 18.7	+ 71 50	5607	13.9		
14 18.9	+ 72 46		15.4		
14 21.4	+ 72 05		15.6		
14 21.8	+ 69 50		15.1		compact
14 23.0	+ 68 35		15.6		
14 26.4	+ 70 08		14.8		
14 26.7	+ 70 10		14.5		
14 26.9	+ 69 56	5671	14.4		
14 35.1	+ 72 40		15.6		
14 35.6	+ 73 45		15.3		double system
14 37.1	+ 69 15	1046*	14.7		
14 45.0	+ 70 33		15.7		
14 45.0	+ 73 01		15.3		double system
14 45.2	+ 69 10		15.2		

Position α 1950 h m	Position δ o ′	NGC IC*	m_p	V_s km/sec	Remarks
14 50.8	+ 74 01		15.4		
14 53.0	+ 70 40		15.5		
14 54.0	+ 73 20	5819	14.3		
14 55.0	+ 68 37	1083*	15.2		
14 57.6	+ 71 53	5832	13.3		
14 59.7	+ 74 05	5836	14.9		
15 01.6	+ 68 28		15.4		compact
15 02.0	+ 70 05		14.9		extremely faint jet
15 06.1	+ 68 33		15.7		
15 08.9	+ 70 16		15.6		very compact
15 10.6	+ 71 12		15.5		
15 13.1	+ 71 25		15.6		
15 15.3	+ 69 30		15.4		compact
15 15.5	+ 69 28		15.3		compact
15 15.7	+ 69 31		15.7		
15 18.6	+ 70 23		15.7		
15 20.6	+ 73 54		15.5		





FIELD No. 338

15^h52^m $+71^\circ30'$

Survey Plate No. 752

GC STARS

Nos.	R.A.	Decl.	m_p
	h m s	o ' "	
20692	15 20 47.4	+ 72 00 43	3.14
20709	15 21 52.4	+ 73 39 09	7.36
21213	15 44 35.1	+ 68 50 02	7.21
21669	16 04 59.2	+ 70 23 43	6.74
21916	16 15 21.5	+ 73 31 03	5.98
22062	16 21 54.9	+ 69 13 30	5.44

CLUSTERS OF GALAXIES

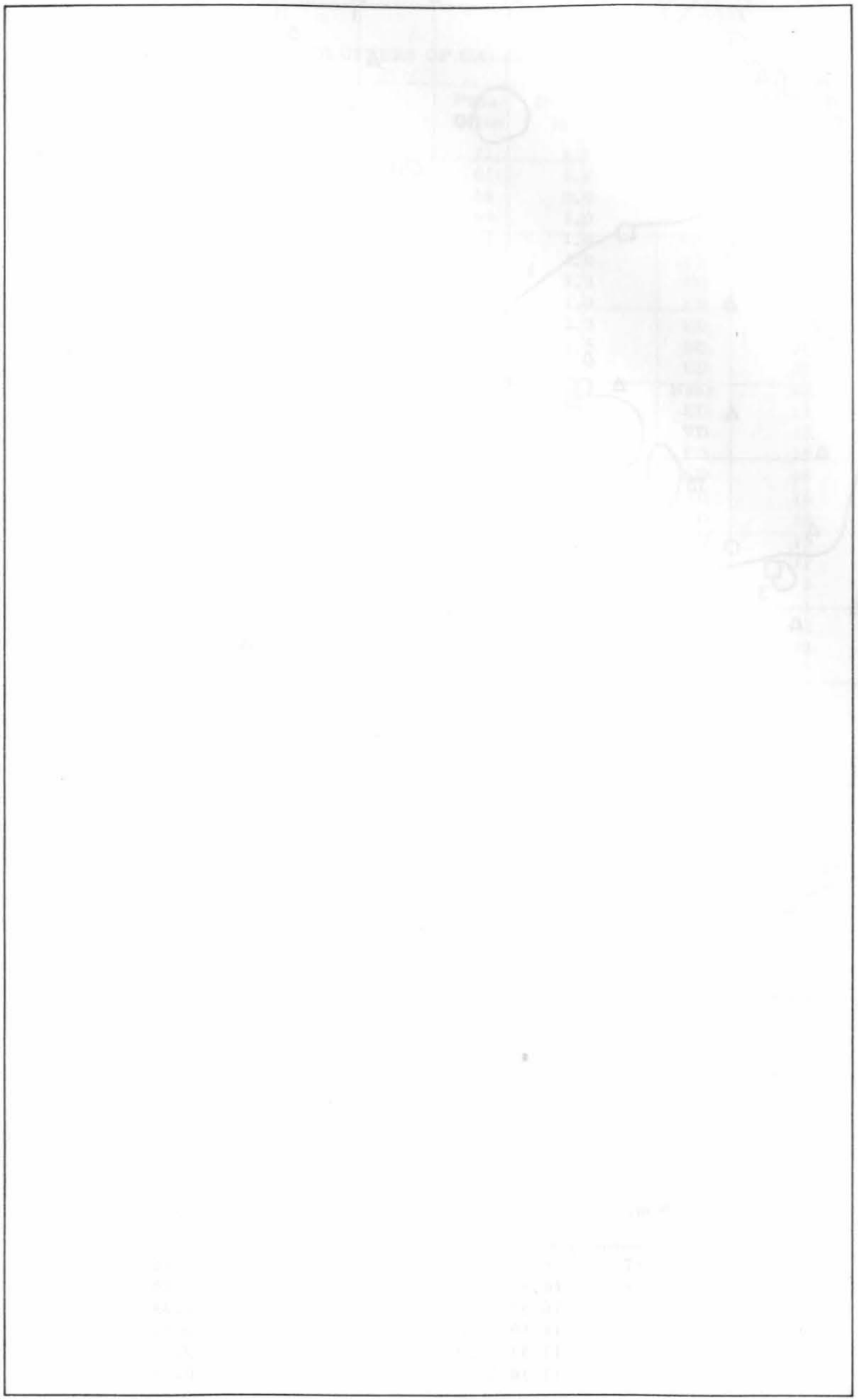
Cluster	Character	Population	Diameter in cm	Distance	Number on chart
1509.5 + 7351	medium compact	97	1.7	ED	1
1514.0 + 7159	medium compact	53	1.1	ED	21
1519.5 + 7020	medium compact	77	1.3	ED	30
1520.9 + 7407	medium compact	108	2.0	VD	5
1523.2 + 7132	open	64	1.8	ED	31
1524.3 + 7233	medium compact	122	1.8	ED	20
1526.6 + 7121	compact	81	1.4	ED	22
1527.1 + 6959	medium compact	118	4.6	MD	29
1532.7 + 7020	medium compact	91	2.2	VD	28
1534.8 + 7420	compact	35	0.4	ED	3
1535.2 + 7220	compact	72	1.6	VD	19
1536.6 + 7015	compact	35	0.7	ED	27
1538.2 + 6959	compact	310	3.3	VD	26
1541.9 + 7054	open	62	1.4	ED	24
1542.2 + 6837	compact	41	0.5	ED	25
1545.4 + 7153	compact	59	1.1	ED	18
1546.0 + 6722	open	169	12.9	Near	32
1548.5 + 7029	open	65	2.1	VD	23
1548.7 + 7140	compact	73	1.2	ED	17
1552.4 + 7044	medium compact	136	2.0	ED	16
1553.4 + 7104	medium compact	67	1.2	ED	15
1553.9 + 7333	medium compact	67	1.9	VD	7
1557.5 + 7036	medium compact	96	2.1	ED	14
1601.1 + 7318	medium compact	56	1.8	VD	8
1605.0 + 7212	medium compact	133	3.1	VD	13
1613.1 + 7145	medium compact	154	3.7	VD	12
1618.2 + 6839	medium compact	98	1.7	VD	11
1624.2 + 7237	medium compact	71	1.5	ED	10
1624.2 + 7340	compact	61	1.4	ED	6
1627.0 + 7101	compact	55	0.9	ED	2
1631.0 + 7216	medium compact	81	1.4	ED	9
1636.4 + 7400	open	68	1.3	ED	4

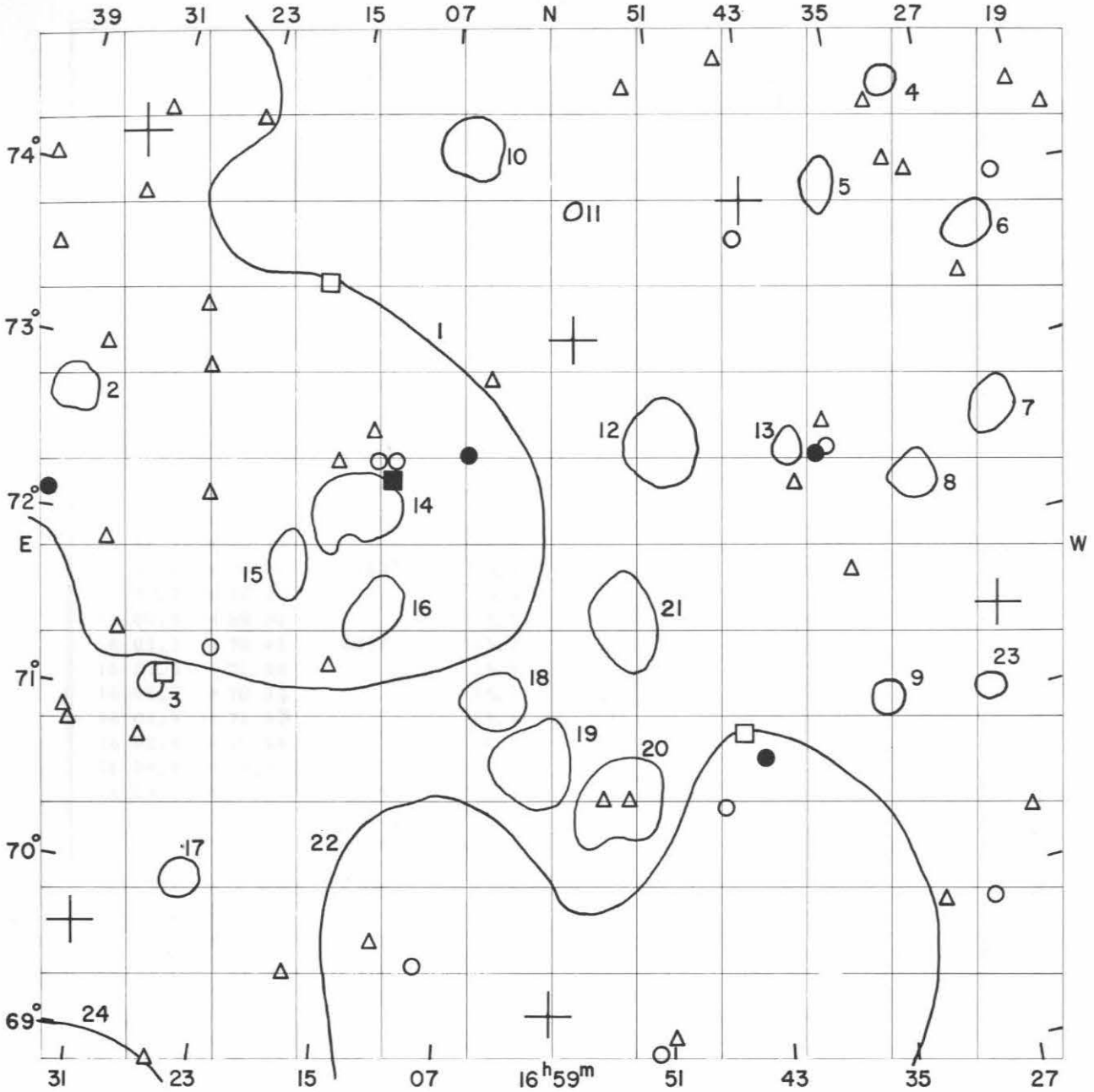
Average number of galaxies per cluster = 89.8

GALAXIES

Position α 1950 h m	Position δ o ′	NGC IC*	m_p	V_s km/sec	Remarks
15 18.6	+ 70 23		15.7		
15 20.0	+ 69 19		15.7		double system
15 20.6	+ 73 54		15.5		
15 21.2	+ 68 28		15.7		
15 21.5	+ 69 05		15.3		very compact
15 23.4	+ 68 50		15.5		
15 23.8	+ 69 57		15.5		extremely compact
15 24.4	+ 68 55	5939	13.7		
15 36.3	+ 73 37		14.9		
15 38.1	+ 73 25		15.5		
15 38.4	+ 72 43		15.4		
15 40.2	+ 70 55		15.3		extremely diffuse spiral
15 40.5	+ 68 58		15.6		
15 43.1	+ 71 00		15.5		very compact
15 44.6	+ 72 35	1145*	15.2		
15 45.8	+ 70 53		15.6		

Position α 1950 h m	Position δ o '	NGC IC*	m_p	V_s km/sec	Remarks
15 47.0	+ 72 19	6011	14.5		
15 47.2	+ 68 32		14.8		
15 47.9	+ 69 38		15.2		
15 48.1	+ 69 37		15.1		
15 48.4	+ 69 33	1146*	14.7		
15 48.9	+ 69 49		15.3		
15 49.1	+ 71 35		15.6		
15 49.3	+ 71 24		15.4		double system
15 49.7	+ 71 20		15.3		
15 49.8	+ 71 25		15.4		
15 50.3	+ 69 43	1147*	15.5		
15 52.0	+ 69 01		15.7		compact
15 52.6	+ 70 32	1154*	14.8		
15 53.0	+ 69 02		15.6		
15 56.7	+ 68 32		15.6		
15 57.8	+ 70 50	6048	13.6		
15 58.7	+ 70 33		15.6		diffuse
15 59.4	+ 70 42	1187*	15.7		
15 59.7	+ 70 29		15.4		
16 00.8	+ 69 52		15.7		
16 01.3	+ 70 45	6071	15.0		
16 01.5	+ 71 38		15.1		
16 01.7	+ 70 32		15.7		
16 01.9	+ 71 32		15.4		
16 02.4	+ 70 34		14.9		
16 04.4	+ 69 36		15.3		
16 04.6	+ 69 50	6079	13.9		
16 05.9	+ 69 45	1201*	15.6		
16 07.2	+ 72 38	6094	14.6		
16 07.4	+ 70 04		15.5		
16 08.0	+ 70 03	6091	14.7		
16 12.7	+ 68 55		15.6		
16 15.6	+ 68 32	1215*	14.0		
16 16.0	+ 68 29	1216*	14.9		
16 16.2	+ 74 20		15.2		
16 16.5	+ 71 05		15.7		diffuse
16 19.3	+ 68 56		15.7		
16 21.6	+ 73 58		14.8		
16 22.0	+ 68 40		15.7		
16 25.3	+ 70 19		15.5		
16 25.4	+ 73 26		15.2		
16 29.0	+ 74 03		15.4		extremely compact
16 30.6	+ 74 08		15.4		





FIELD No. 339

16^h59^m $+72^\circ00'$

Survey Plate No. 756

GC STARS

Nos.	R.A.	Decl.	m_p
	h m s	° ′ ″	
22147	16 25 57.5	+ 71 29 46	7.16
22548	16 43 02.4	+ 73 58 44	6.76
22910	16 57 15.5	+ 73 12 14	6.24
22962	16 59 18.8	+ 69 15 35	6.52
23811	17 31 42.5	+ 69 38 05	7.32
23865	17 34 03.4	+ 74 15 33	7.06

CLUSTERS OF GALAXIES

Cluster	Character	Population	Diameter in cm	Distance	Number on chart
1624.2 + 7237	medium compact	71	1.5	ED	7
1624.2 + 7340	compact	61	1.4	ED	6
1627.0 + 7101	compact	55	0.9	ED	23
1630.1 + 7435	compact	64	1.0	ED	4
1631.0 + 7216	medium compact	81	1.4	ED	8
1634.5 + 7101	compact	60	1.0	ED	9
1636.4 + 7400	open	68	1.3	ED	5
1640.4 + 7230	compact	44	1.0	ED	13
1650.3 + 7234	compact	135	2.5	ED	12
1653.5 + 7132	medium compact	210	2.5	ED	21
1654.2 + 7030	compact	57	2.8	ED	20
1655.8 + 6844	open	292	20.3	Near	22
1657.4 + 7355	compact	35	0.5	ED	11
1700.5 + 7042	open	79	2.7	VD	19
1703.1 + 7104	medium compact	79	1.9	ED	18
1705.8 + 7417	compact	58	1.9	ED	10
1712.2 + 7135	medium compact	59	1.7	VD	16
1714.0 + 7209	open	87	2.5	D	14
1719.0 + 7150	medium compact	89	1.6	VD	15
1724.7 + 6956	medium compact	71	1.3	ED	17
1728.0 + 7104	medium compact	55	1.0	ED	3
1730.9 + 7304	medium compact	345	20.2	Near	1
1736.5 + 7242	medium compact	74	1.5	ED	2
1745.6 + 6703	medium compact	297	16.0	Near	24

Average number of galaxies per cluster = 105.3

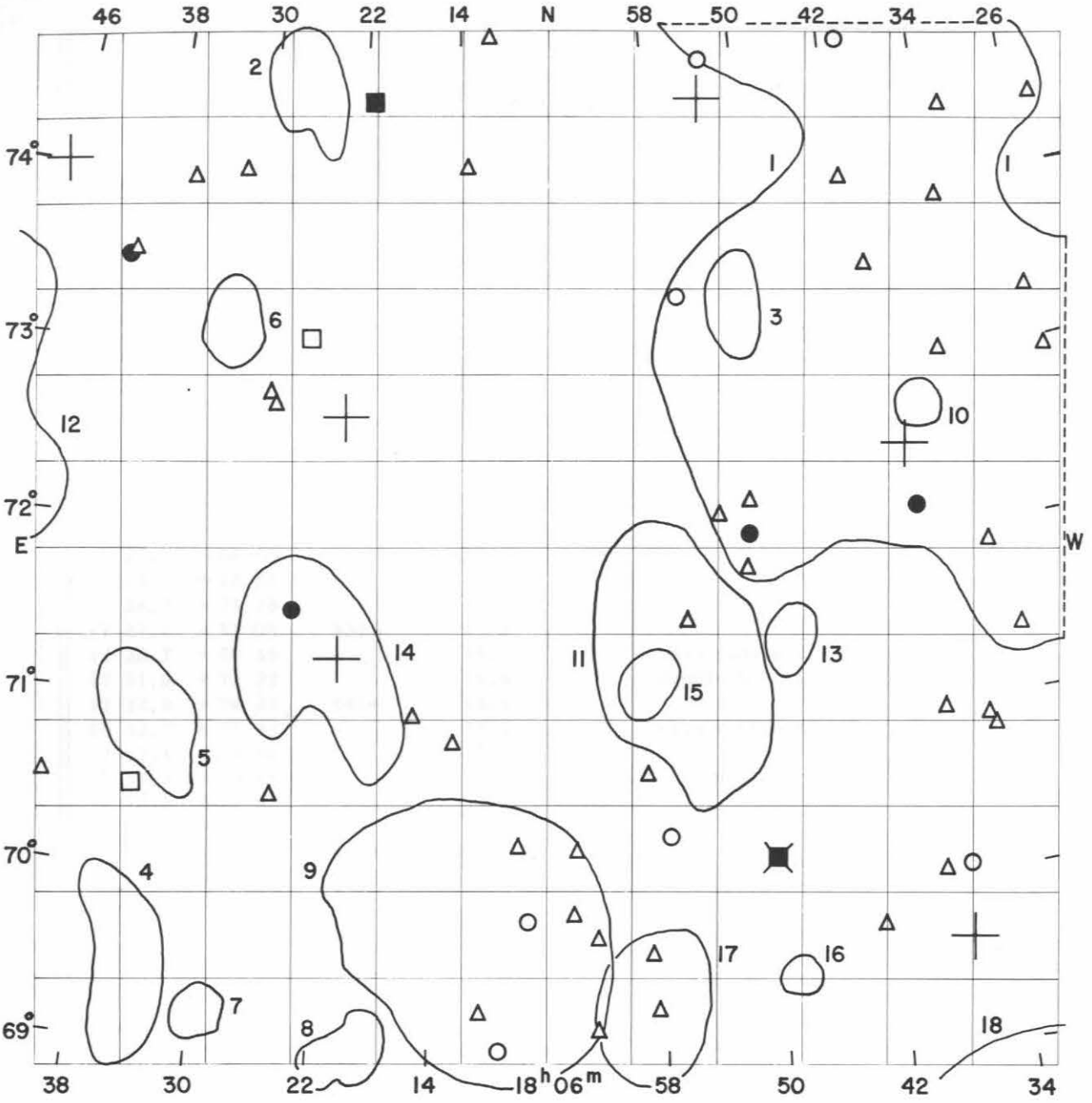
GALAXIES

Position α 1950 h m	Position δ ° ′	NGC IC*	m_p	V_s km/sec	Remarks
16 16.2	+ 74 20		15.2		
16 19.0	+ 74 30		15.6		
16 21.6	+ 73 58		14.8		
16 25.3	+ 70 19		15.5		
16 25.4	+ 73 26		15.2		
16 28.6	+ 69 49		15.0		double nebula
16 29.0	+ 74 03		15.4		extremely compact
16 30.6	+ 74 08		15.4		
16 31.4	+ 74 28		15.7		
16 31.9	+ 69 50		15.7		
16 36.3	+ 71 47		15.5		
16 37.3	+ 72 30		14.4		
16 37.6	+ 72 40		15.6		
16 38.2	+ 72 28		13.1		
16 40.1	+ 72 18		15.7		
16 43.7	+ 70 44	6232	13.5		
16 43.8	+ 73 45		15.0		
16 44.5	+ 74 47		15.1		very compact
16 45.0	+ 70 53	6236	12.7		
16 46.8	+ 70 28		14.1		
16 50.7	+ 69 08		15.6		
16 51.8	+ 69 01		14.7		
16 52.8	+ 74 39		15.3		
16 53.5	+ 70 31		15.6		

Position α 1950 h m	Position δ o '	NGC IC*	m_p	V_s km/sec	Remarks
16 55.2	+ 70 31		15.3		
17 03.7	+ 72 57		15.7		
17 05.4	+ 72 31		13.8		
17 08.4	+ 69 33		15.0		diffuse spiral
17 11.0	+ 72 28	1251*	14.4		
17 11.3	+ 69 41		15.5		
17 11.3	+ 72 21	6340	11.9	+ 2109	m_H = 12.8
17 12.4	+ 72 27	1254*	14.7		
17 12.9	+ 72 39		15.3		
17 15.3	+ 71 16		15.1		double system
17 15.5	+ 72 27		15.5		very diffuse
17 17.1	+ 69 28	6248	15.7		
17 17.3	+ 73 29		12.9		
17 23.9	+ 74 25		15.3		triple system
17 24.0	+ 71 18	1261*	14.9		double system, halo
17 25.2	+ 72 12		15.2		
17 25.7	+ 68 53		15.5		
17 26.1	+ 72 56		15.4		
17 26.9	+ 73 18		15.7		
17 27.1	+ 71 08	6395	12.8		
17 28.7	+ 70 45		15.7		very compact
17 31.0	+ 71 22		15.4		double nebula
17 32.0	+ 74 25	6414	15.6		
17 32.7	+ 71 53		15.2		very compact
17 33.4	+ 73 54		15.5		
17 33.8	+ 70 48		15.6		compact
17 34.2	+ 70 52		15.7		
17 34.6	+ 73 00		15.5		
17 37.6	+ 72 07	6434	13.2		
17 39.9	+ 73 32	6461	15.7		
17 41.2	+ 74 03		15.6		

MAGNITUDES AND TYPES FROM OTHER SOURCES

NGC IC*	Bigay 1951		Pettit 1954		Humason, Mayall, Sandage 1956		Holmberg 1958	
6340	-	-	12.02	Sa	12.0	Sa	-	-



FIELD No. 340

18^h06^m $+72^\circ00'$

Survey Plate No. 801

GC STARS

Nos.	R.A.	Decl.	m_p
	h m s	° ′ ″	
23939	17 37 05.1	+ 69 36 06	6.48
23968	17 38 05.3	+ 72 28 58	5.96
24368	17 52 53.1	+ 74 34 43	6.83
25114	18 21 28.5	+ 71 18 42	4.24
25122	18 21 57.5	+ 72 42 42	3.69
25803	18 47 02.0	+ 74 01 42	5.38

CLUSTERS OF GALAXIES

Cluster	Character	Population	Diameter in cm	Distance	Number on chart
1730.9 + 7304	medium compact	345	20.2	Near	1
1736.5 + 7242	medium compact	74	1.5	ED	10
1745.6 + 6703	medium compact	297	16.0	Near	18
1748.0 + 7125	medium compact	87	1.9	VD	13
1748.8 + 6928	medium compact	52	1.2	ED	16
1750.7 + 7321	compact	92	2.4	D	3
1756.0 + 7117	open	99	6.8	MD	11
1758.6 + 7111	medium compact	57	2.0	ED	15
1758.7 + 6920	medium compact	135	4.3	D	17
1811.4 + 6941	medium compact	229	8.9	Near	9
1819.6 + 6901	medium compact	88	2.4	D	8
1822.7 + 7116	medium compact	108	5.5	D	14
1827.1 + 7435	medium compact	123	3.0	D	2
1829.3 + 6912	compact	96	1.7	ED	7
1831.4 + 7310	open	86	2.3	VD	6
1834.6 + 6925	medium compact	114	3.8	MD	4
1834.7 + 7053	medium compact	107	3.4	D	5
1853.0 + 7226	medium compact	175	8.4	Near	12

Average number of galaxies per cluster = 131.3

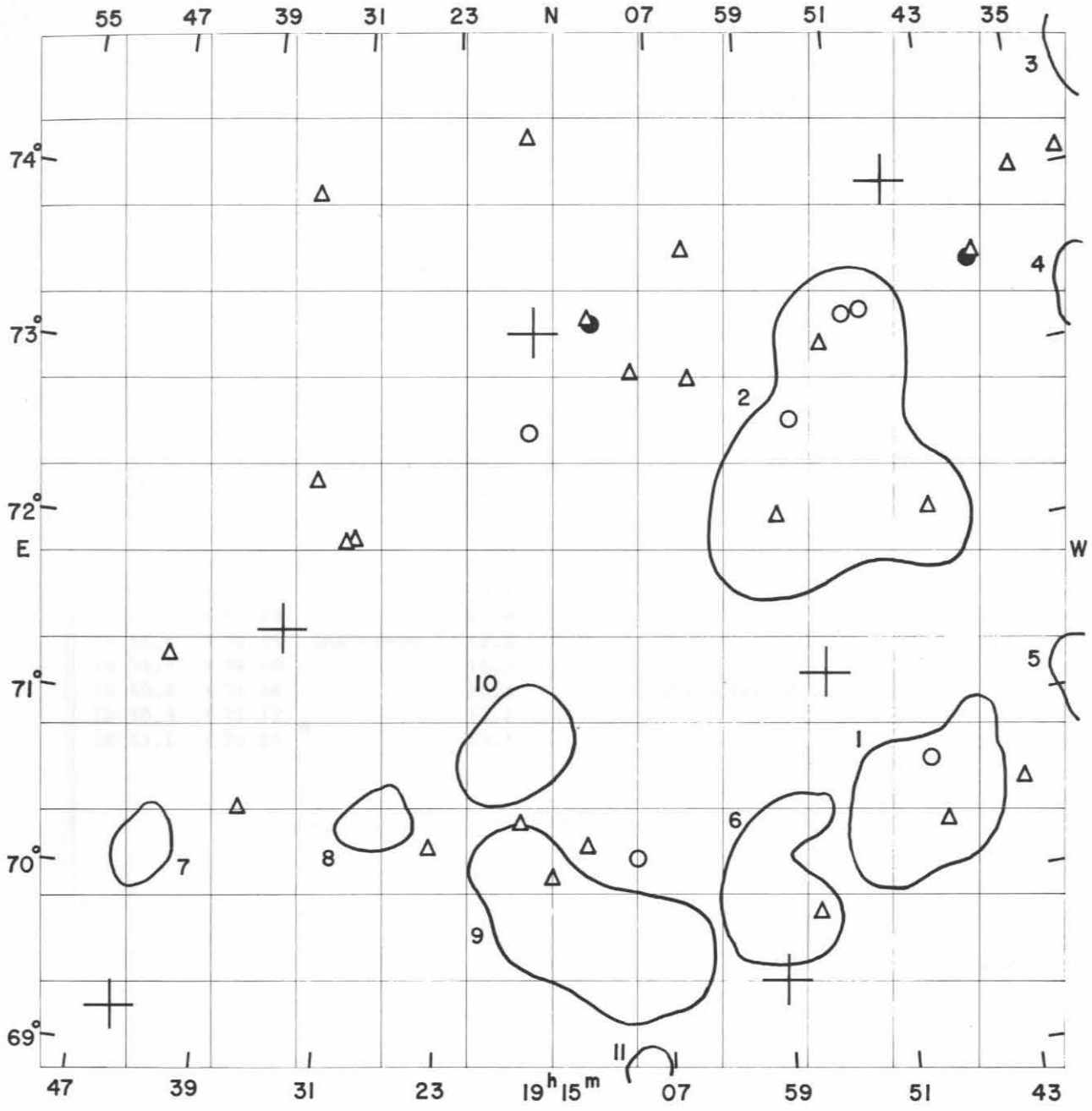
GALAXIES

Position α 1950 h m	Position δ 1950 ° ′	NGC IC*	m_p	V_s km/sec	Remarks
17 23.9	+ 74 25		15.3		triple system
17 26.1	+ 72 56		15.4		
17 26.9	+ 73 18		15.7		
17 31.0	+ 71 22		15.4		double nebula
17 32.0	+ 74 25	6414	15.6		
17 32.7	+ 71 53		15.2		very compact
17 33.4	+ 73 54		15.5		
17 33.8	+ 70 48		15.6		compact
17 34.2	+ 70 52		15.7		
17 34.6	+ 73 00		15.5		
17 36.6	+ 70 01	6424	14.5		compact
17 37.3	+ 70 57		15.3		
17 37.6	+ 72 07	6434	13.2		
17 38.5	+ 70 00		15.5		
17 39.9	+ 73 32	6461	15.7		
17 40.3	+ 74 52		14.9		
17 41.2	+ 74 03		15.6		
17 43.0	+ 69 43		15.4		very compact
17 49.9	+ 70 10	6503	10.9	+ 33	m_H = 11.4 Sc
17 50.4	+ 72 14		15.2		
17 50.7	+ 72 02	6508	14.0		compact
17 50.9	+ 71 50		15.1		
17 52.3	+ 74 48		15.0		
17 52.8	+ 72 09		15.1		
17 55.4	+ 73 25	6538	14.1		
17 55.7	+ 71 33		15.5		extremely diffuse spiral
17 57.3	+ 70 18		15.0		compact
17 58.5	+ 69 18		15.4		extremely long jet
17 58.7	+ 69 38		15.6		double system, halo
17 58.8	+ 70 40		15.2		double system

Position α 1950 h m	Position δ o ′	NGC IC*	m_p	V_s km/sec	Remarks
18 02.4	+ 69 43		15.2		
18 02.6	+ 69 11		15.7		very compact
18 04.0	+ 70 14		15.3		
18 04.1	+ 69 51		15.5		
18 07.2	+ 69 49		14.4		extremely compact
18 08.0	+ 70 15		15.6		
18 09.2	+ 69 04	6598	14.2		
18 10.6	+ 69 17		15.7		diffuse
18 11.4	+ 74 55		15.6		very compact
18 12.8	+ 70 50		15.7		
18 13.0	+ 74 10		15.5		compact
18 15.7	+ 71 00	6651	15.1		diffuse spiral
18 21.2	+ 74 32	6643	11.8	+ 1588	m_H = 12.7 Sb
18 25.1	+ 71 35		13.7		
18 25.2	+ 73 09	6654	12.7	+ 1924	
18 25.7	+ 70 30		15.6		
18 27.6	+ 72 45		15.7		
18 28.0	+ 72 48		15.6		
18 31.7	+ 74 05		15.4		
18 35.4	+ 70 29	6689=6690	12.6		
18 36.1	+ 74 00		15.3		
18 40.0	+ 73 34		15.4		disrupted, diffuse
18 40.4	+ 73 32		13.6		
18 41.6	+ 70 30		15.5		

MAGNITUDES AND TYPES FROM OTHER SOURCES

NGC IC*	Bigay 1951		Pettit 1954		Humason, Mayall, Sandage 1956		Holmberg 1958	
6503	11.1	Sc	10.87	Sc	10.7	Sc	10.77	Sc-
6643	-	-	11.88	Sc	11.8	Sbc	11.61	Sc-
6654	-	-	12.80	SBa	12.5	SBa	-	-



FIELD No. 341

19^h15^m $+72^o00'$

Survey Plate No. 1149

GC STARS

Nos.	R.A.	Decl.	m_p
	h m s	o ' "	
25803	18 47 02.0	+ 74 01 42	5.38
26024	18 55 01.0	+ 71 13 51	4.91
26146	18 59 11.7	+ 69 27 35	6.40
26638	19 16 31.5	+ 73 15 48	4.63
27131	19 34 55.8	+ 71 29 40	6.71
27367	19 44 23.2	+ 69 12 54	5.90

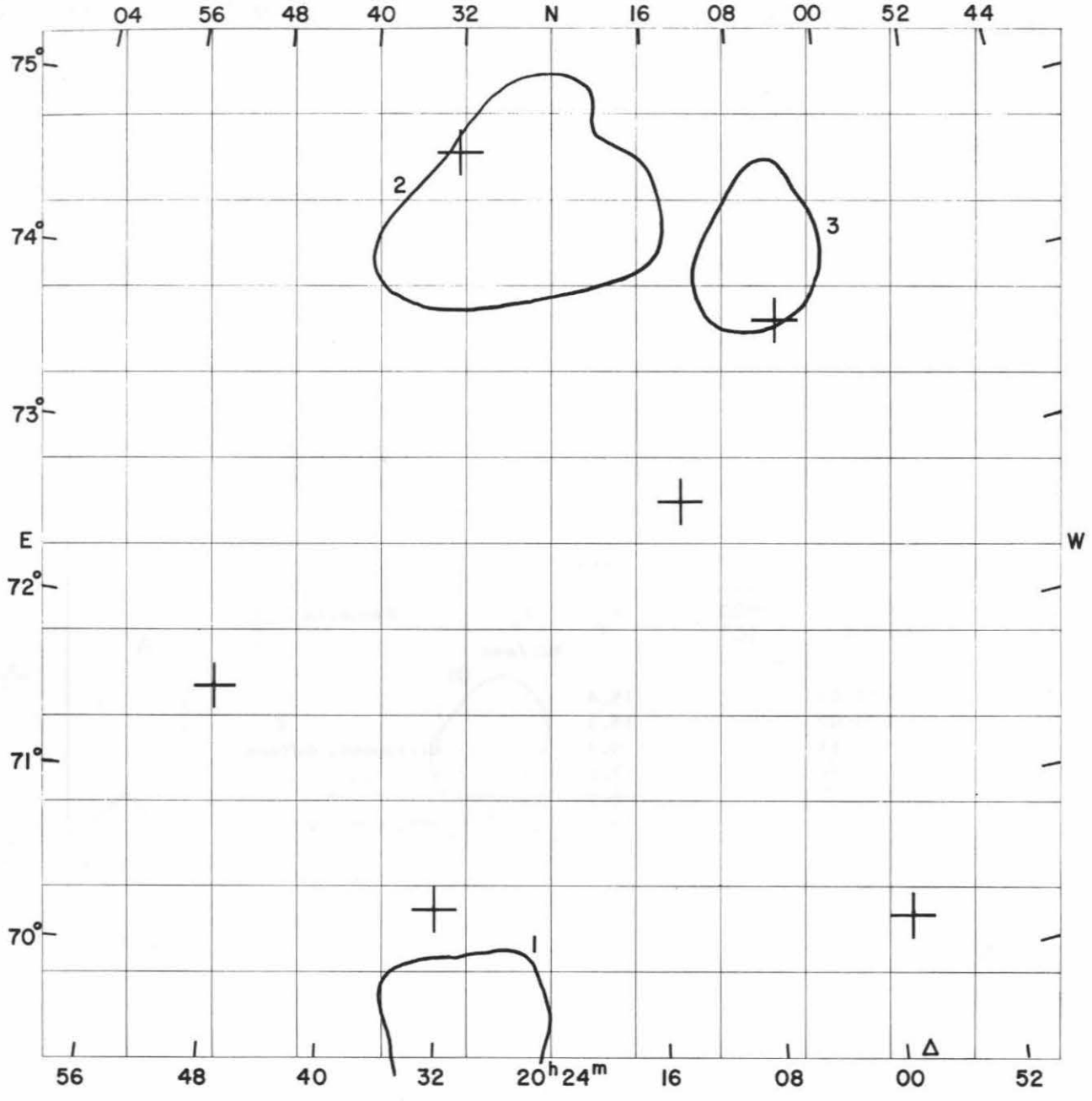
CLUSTERS OF GALAXIES

Cluster	Character	Population	Diameter in cm	Distance	Number on chart
1827.1 + 7435	medium compact	123	3.0	D	3
1831.4 + 7310	open	86	2.3	VD	4
1834.7 + 7053	medium compact	107	3.4	D	5
1848.5 + 7025	medium compact	91	5.1	MD	1
1853.0 + 7226	medium compact	175	8.4	Near	2
1859.0 + 6957	medium compact	103	4.5	MD	6
1908.7 + 6854	compact	79	1.6	ED	11
1912.0 + 6945	medium compact	185	5.9	D	9
1917.5 + 7050	open	91	3.6	D	10
1927.1 + 7024	medium compact	82	2.1	ED	8
1943.4 + 7007	medium compact	117	2.1	ED	7

Average number of galaxies per cluster = 112.6

GALAXIES

Position α 1950 h m	Position δ o ′	NGC IC*	m_p	V_s km/sec	Remarks
18 31.7	+ 74 05		15.4		
18 36.1	+ 74 00		15.3		
18 40.0	+ 73 34		15.4		disrupted, diffuse
18 40.4	+ 73 32		13.6		
18 41.6	+ 70 30		15.5		
18 46.2	+ 72 08		15.7		long streamer
18 47.1	+ 70 18		15.1		
18 48.0	+ 70 41		14.9		double system
18 49.8	+ 73 18		14.6		
18 51.4	+ 73 17		14.8		double system, halo + jet
18 53.4	+ 73 07		15.6		
18 56.3	+ 72 43	6747	15.0		
18 56.7	+ 69 50		15.4		diffuse spiral
18 57.9	+ 72 09		15.6		
19 04.2	+ 72 58		15.2		
19 04.3	+ 73 43		15.3		
19 08.9	+ 73 00		15.7		
19 09.0	+ 70 12		14.4		
19 11.9	+ 73 18	6786	13.7		} double system
19 12.0	+ 73 19		15.1		
19 12.6	+ 70 17		15.7		
19 15.0	+ 70 06		15.6		
19 16.8	+ 72 40		14.7		
19 17.1	+ 74 22		15.7		
19 17.2	+ 70 26		15.5		
19 23.6	+ 70 16		15.5		
19 29.8	+ 72 01		15.7		
19 30.5	+ 72 00		15.3		
19 33.2	+ 72 21		15.2		
19 34.7	+ 74 00		15.6		
19 37.0	+ 70 26		15.7		
19 43.1	+ 71 17		15.6		



FIELD No. 342

20^h24^m $+72^o30'$

Survey Plate No. 809

GC STARS

Nos.	R.A.	Decl.	m_p
	h m s	o ' "	
27748	19 58 49.8	+ 70 13 42	6.46
27920	20 05 10.1	+ 73 45 54	6.86
28156	20 13 47.6	+ 72 44 38	7.11
28639	20 32 11.4	+ 74 47 01	5.18
28643	20 32 19.5	+ 70 21 38	6.72
29090	20 49 23.2	+ 71 35 09	8.2

CLUSTERS OF GALAXIES

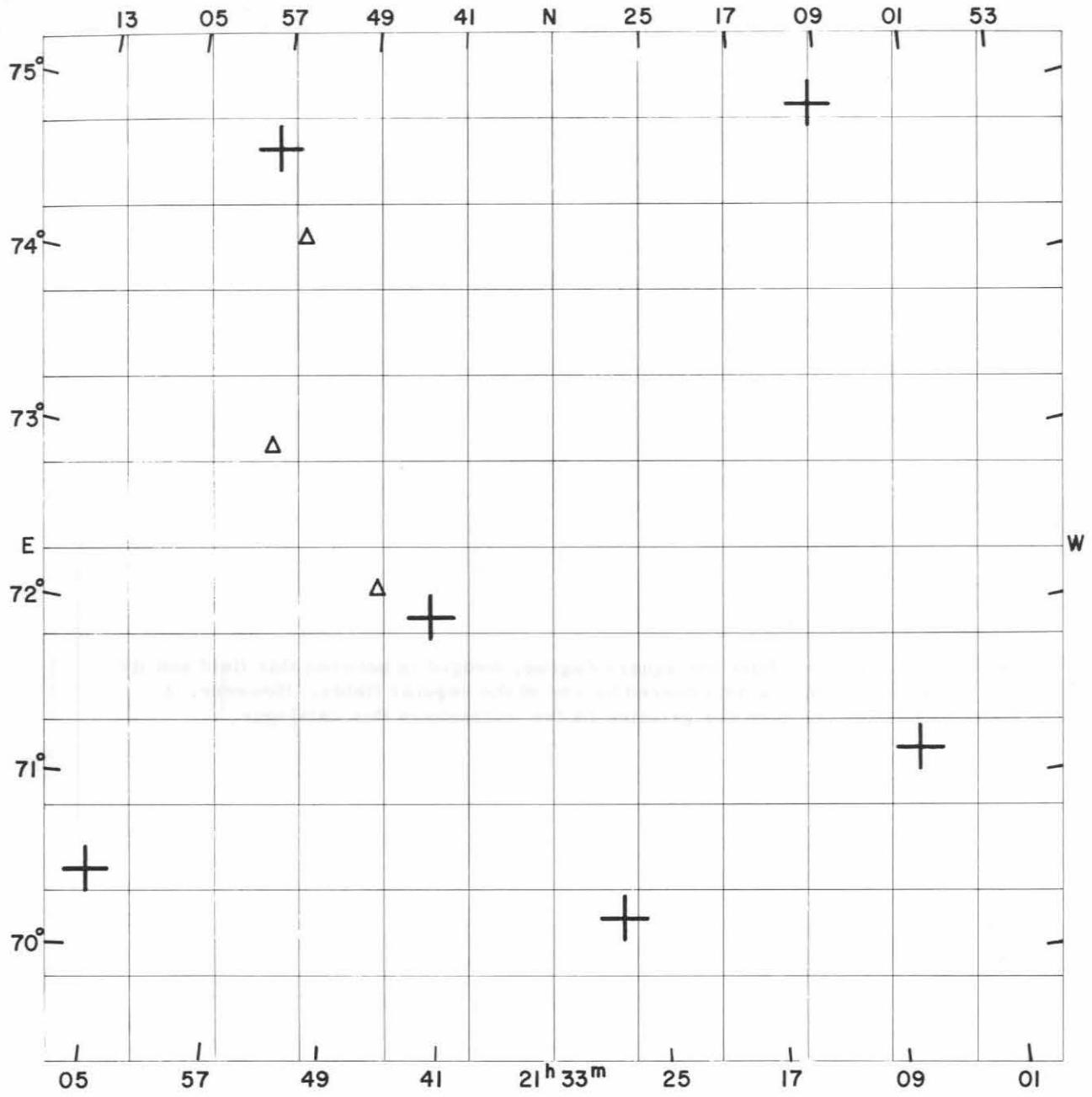
Cluster	Character	Population	Diameter in cm	Distance	Number on chart
2006.1 + 7407	medium compact	122	4.5	MD	3
2026.5 + 7425	open	109	7.7	Near	2
2030.0 + 6937	medium compact	95	5.6	MD	1

Average number of galaxies per cluster = 108.7

GALAXIES

Position α 1950 h m	Position δ 1950 o '	NGC IC*	m_p	V_s km/sec	Remarks
19 58.6	+ 69 27		15.7		

An irregular area of about one square degree, wedged in between this field and its neighbors on the SW, is not covered by any of the regular fields. However, it contains neither clusters nor galaxies fit for inclusion in this catalogue.



FIELD No. 343

21^h33^m $+72^\circ30'$

Survey Plate No. 772

GC STARS

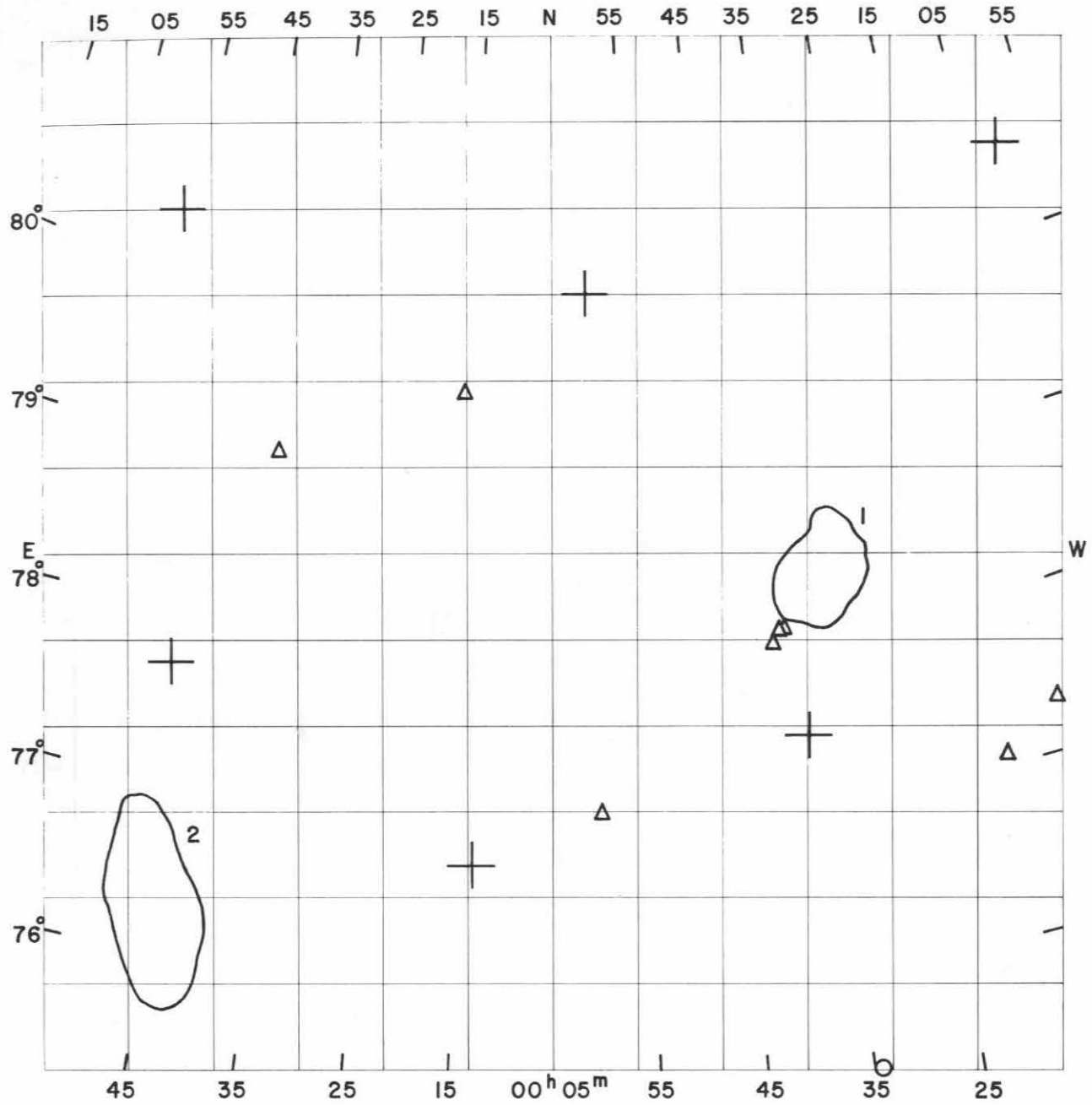
Nos.	R.A.	Decl.	m_p
	h m s	° ' "	
29550	21 06 06.0	+ 71 13 53	5.96
29641	21 09 52.1	+ 75 01 23	6.96
30118	21 28 01.4	+ 70 20 28	3.32
30452	21 42 28.0	+ 72 05 27	5.40
30772	21 57 23.2	+ 74 45 26	6.64
30974	22 06 10.4	+ 70 26 58	7.00

CLUSTERS OF GALAXIES

No clusters in this field

GALAXIES

Position α 1950 h m	Position δ o ′	NGC IC*	m_p	V_s km/sec	Remarks
21 46.8	+ 72 15		15.7		extremely diffuse
21 54.4	+ 74 15		15.5		
21 55.7	+ 73 01		15.2		extremely diffuse spiral



FIELD No. 344

0^h05^m $+78^\circ30'$

Survey Plate No. 1213

GC STARS

Nos.	R.A.	Decl.	m_p
	h m s	o ' "	
32113	23 00 24.2	+ 80 30 44	6.68
32875	23 37 16.6	+ 77 21 12	3.42
4	0 00 09.6	+ 80 00 14	7.69
303	0 13 21.6	+ 76 40 23	6.23
995	0 47 15.5	+ 77 40 55	6.75
1175	0 56 14.8	+ 80 16 34	6.63

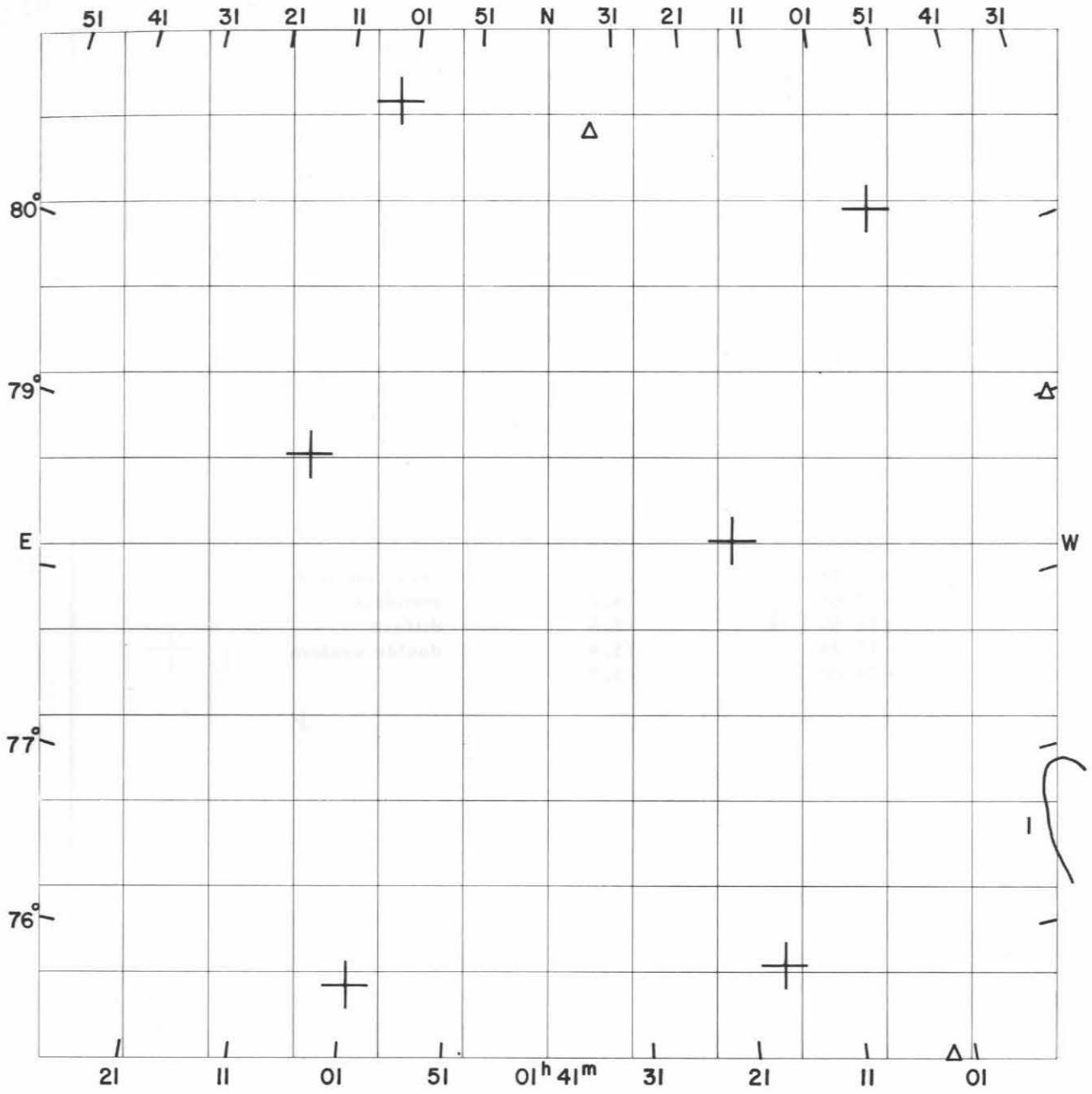
CLUSTERS OF GALAXIES

Cluster	Character	Population	Diameter in cm	Distance	Number on chart
2333.2 + 7815	medium compact	107	3.1	MD	1
0044.5 + 7614	medium compact	76	4.3	MD	2

Average number of galaxies per cluster = 91.5

GALAXIES

Position α 1950 h m	Position δ 1950 o '	NGC IC*	m_p	V_s km/sec	Remarks
23 10.4	+ 77 19		15.4		
23 16.8	+ 77 03		15.6		
23 34.1	+ 75 23	1502*	14.7		
23 38.3	+ 77 58		15.5		
23 39.0	+ 77 58		15.6		very compact
23 39.9	+ 77 54		15.7		compact
23 59.9	+ 76 59		15.6		diffuse
0 16.0	+ 79 26		15.4		double system
0 38.4	+ 79 00		15.7		



FIELD No. 345

1^h41^m $+78^\circ30'$

Survey Plate No. 1214

GC STARS

Nos.	R.A.	Decl.	m_p
	h m s	° ′ ″	
1175	0 56 14.8	+ 80 16 34	6.63
1616	1 17 52.2	+ 75 58 40	6.45
1642	1 19 17.8	+ 78 27 54	6.10
2475	2 00 40.8	+ 75 52 35	5.30
2517	2 03 07.1	+ 81 03 31	5.99
2651	2 10 13.6	+ 78 56 48	7.04

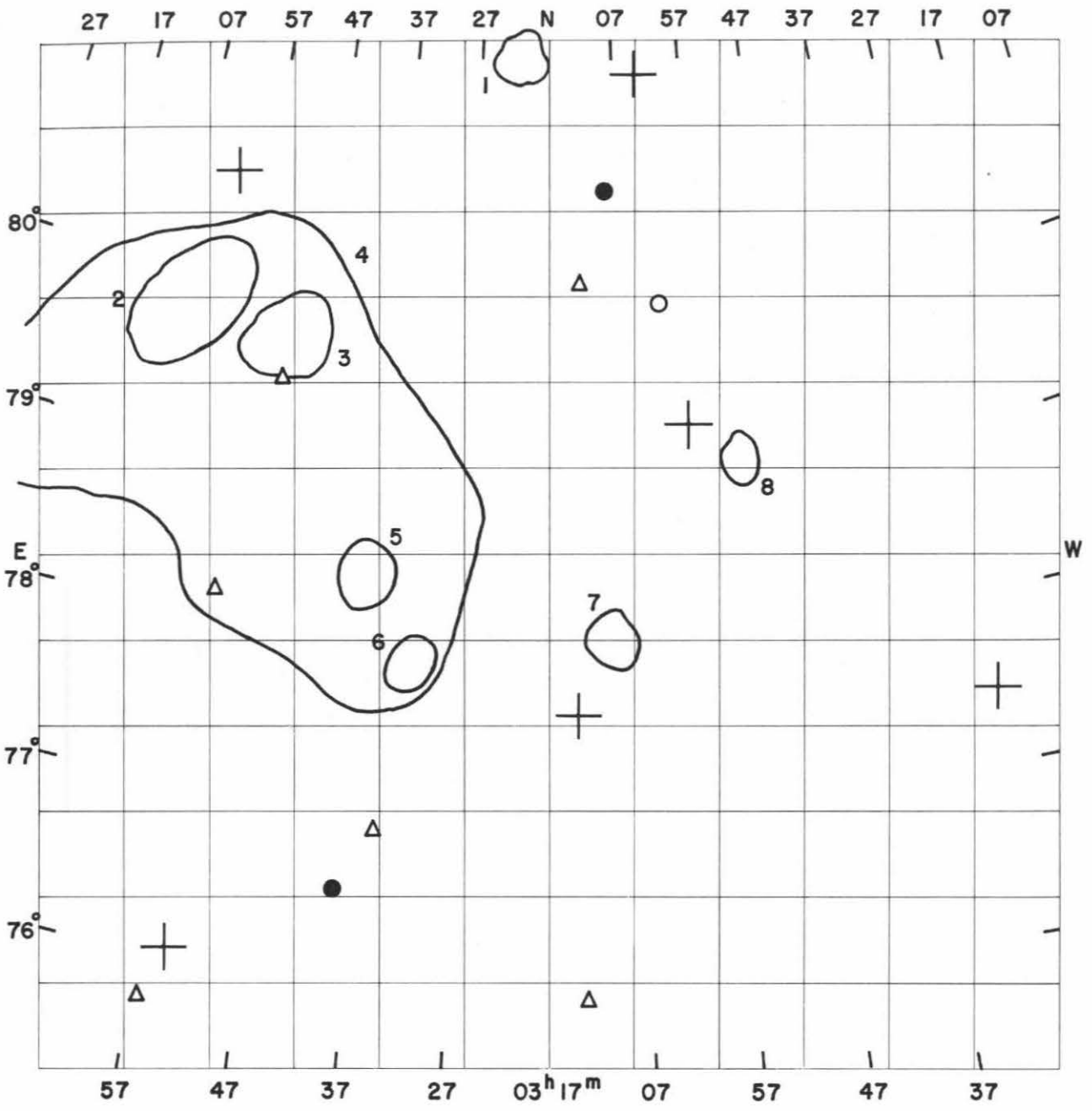
CLUSTERS OF GALAXIES

Cluster	Character	Population	Diameter in cm	Distance	Number on chart
0044.5 + 7614	medium compact	76	4.3	MD	1

Average number of galaxies per cluster = 76.0

GALAXIES

Position α 1950 h m	Position δ 1950 o '	NGC IC*	m_p	V_s km/sec	Remarks
0 38.4	+ 79 00		15.7		
1 03.0	+ 75 20		15.2		
1 35.0	+ 80 55		15.7		very long, faint jet



FIELD No. 346

3^h17^m $+78^\circ30'$

Survey Plate No. 1226

GC STARS

Nos.	R.A.	Decl.	m_p
	h m s	o ' "	
3008	2 28 01.2	+ 77 26 43	7.82
3638	2 59 21.3	+ 79 13 26	5.66
3715	3 03 48.0	+ 81 16 51	5.95
3912	3 13 54.0	+ 77 33 15	5.50
4766	3 54 48.9	+ 76 01 34	8.32
4894	4 01 33.7	+ 80 33 56	5.25

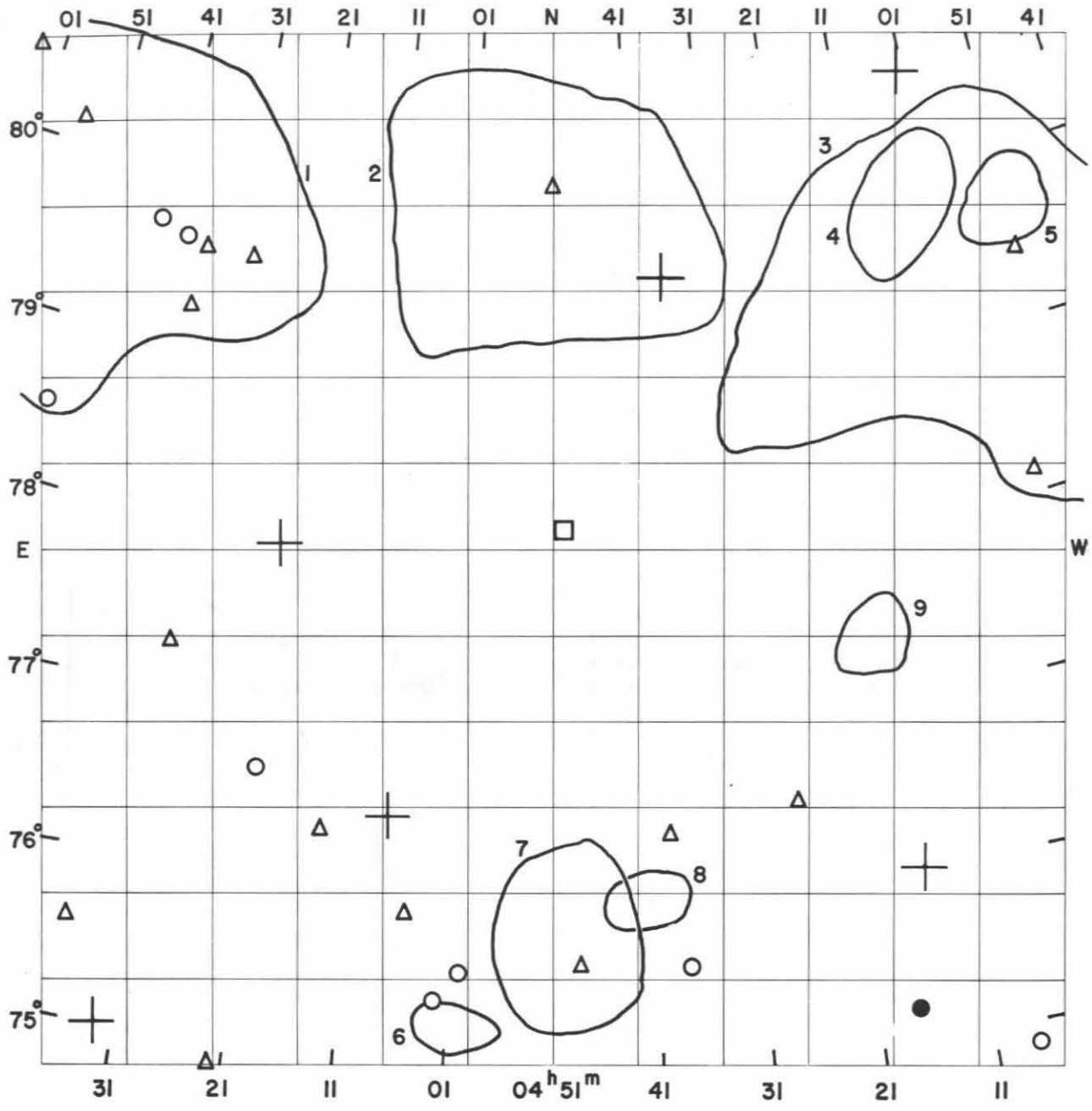
CLUSTERS OF GALAXIES

Cluster	Character	Population	Diameter in cm	Distance	Number on chart
0253.3 + 7900	medium compact	62	1.4	VD	8
0309.7 + 7759	medium compact	67	1.8	ED	7
0321.0 + 8124	compact	61	1.7	ED	1
0332.3 + 7750	medium compact	55	1.7	VD	6
0337.9 + 7820	compact	62	1.9	VD	5
0351.6 + 7940	medium compact	95	2.7	VD	3
0354.0 + 7900	open	205	13.9	Near	4
0404.7 + 7947	medium compact	127	3.8	D	2

Average number of galaxies per cluster = 91.8

GALAXIES

Position α 1950 h m	Position δ 1950 o '	NGC IC*	m_p	V_s km/sec	Remarks
3 02.0	+ 79 57		14.3		
3 09.0	+ 80 37	1184	13.4		
3 13.0	+ 80 04		15.5		very diffuse spiral
3 13.4	+ 75 54		15.6		
3 35.3	+ 76 51		15.7		
3 38.8	+ 76 29	334*	13.2		
3 51.4	+ 79 25		15.4		
3 55.4	+ 78 08		15.2		
3 56.6	+ 75 44		15.6		



FIELD No. 347

4^h51^m $+78^o00'$

Survey Plate No. 1322

GC STARS

Nos.	R.A.	Decl.	m_p
	h m s	o ' "	
4894	4 01 33.7	+ 80 33 56	5.25
5180	4 14 43.2	+ 75 59 11	6.63
5677	4 36 57.9	+ 79 33 46	6.57
6323	5 07 31.3	+ 76 24 50	6.31
6647	5 21 42.2	+ 77 56 10	6.54
6938	5 33 01.6	+ 75 00 53	6.36

CLUSTERS OF GALAXIES

Cluster	Character	Population	Diameter in cm	Distance	Number on chart
0351.6 + 7940	medium compact	95	2.7	VD	5
0354.0 + 7900	open	205	13.9	Near	3
0404.7 + 7947	medium compact	127	3.8	D	4
0416.5 + 7719	compact	86	2.2	VD	9
0441.7 + 7555	medium compact	62	2.1	VD	8
0449.4 + 7543	open	105	5.3	D	7
0453.2 + 7955	medium compact	170	9.8	MD	2
0500.4 + 7511	medium compact	81	2.0	VD	6
0603.0 + 7922	open	151	15.5	Near	1

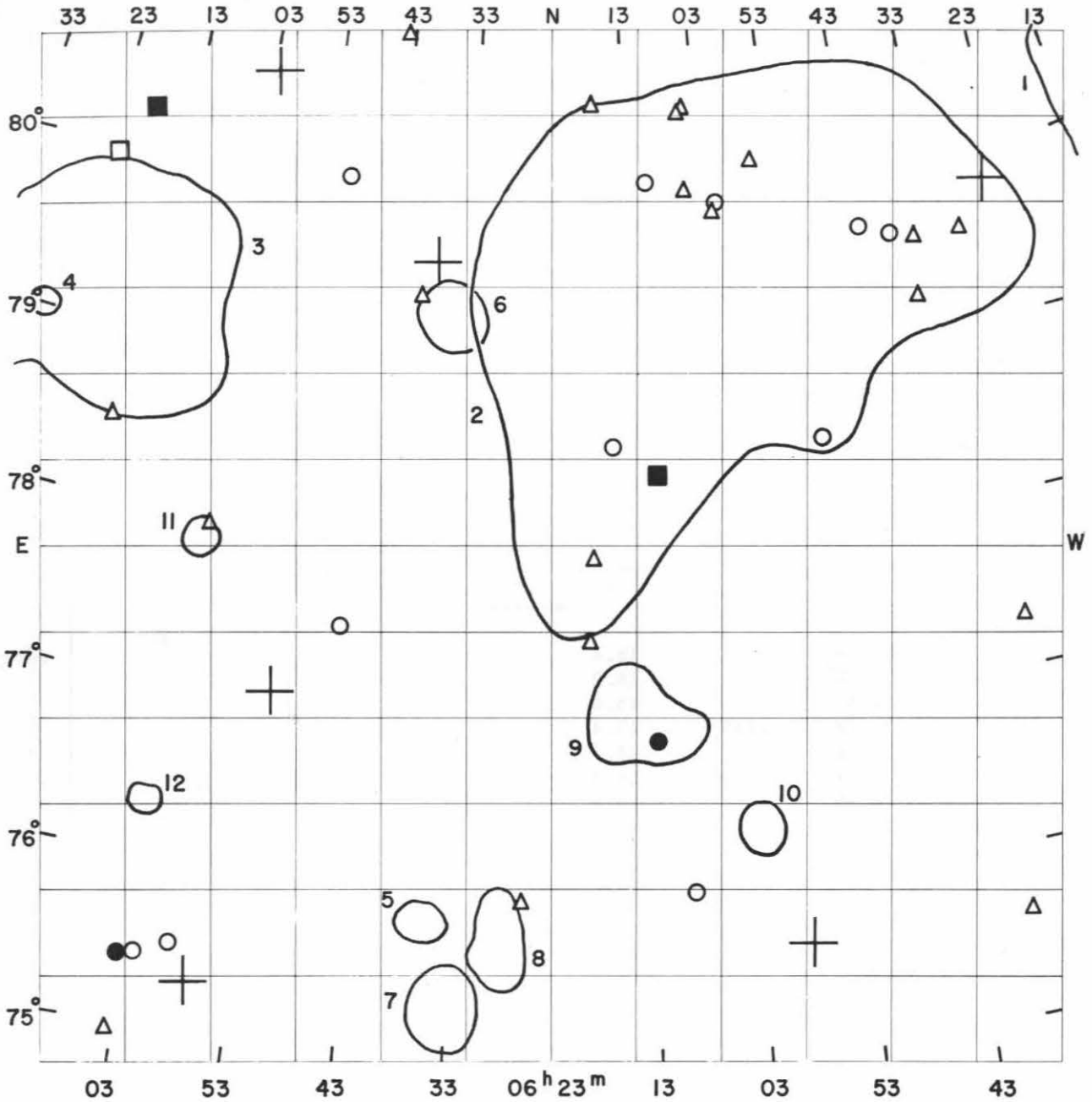
Average number of galaxies per cluster = 120.2

GALAXIES

Position α 1950 h m	Position δ 1950 o '	NGC IC*	m_p	V_s km/sec	Remarks
3 51.4	+ 79 25		15.4		
3 55.4	+ 78 08		15.2		
4 06.9	+ 74 53		15.0		
4 17.0	+ 75 12	1530	13.4		
4 26.3	+ 76 28		15.1		
4 37.8	+ 75 34	381*	14.5		
4 39.4	+ 76 20		15.5		
4 48.5	+ 75 35		15.6		
4 49.5	+ 78 07	391*	12.8	+ 1607	
4 51.0	+ 80 05		15.5		
4 59.8	+ 75 32		14.1		
5 02.1	+ 75 22		14.6		
5 05.4	+ 75 52		15.6		very diffuse spiral
5 14.1	+ 76 18		15.7		
5 21.0	+ 76 37		14.9		
5 22.1	+ 74 52		15.7		very compact, faint jet
5 30.0	+ 79 33		15.3		
5 32.1	+ 77 17		15.6		
5 36.0	+ 79 34		15.7		
5 36.7	+ 79 13		15.4		
5 37.4	+ 75 36		15.3		
5 38.7	+ 79 37		14.7		
5 42.7	+ 79 41		14.8		
5 51.0	+ 78 30		15.0		
5 56.0	+ 80 08		15.1		
6 05.0	+ 80 29		15.5		

MAGNITUDES AND TYPES FROM OTHER SOURCES

NGC IC*	Bigay 1951		Pettit 1954		Humason, Mayall, Sandage 1956		Holmberg 1958	
391*	-	-	12.85	Sb	12.9	Sb	-	-



FIELD No. 348

6^h23^m + 78°00'

Survey Plate No. 1256

GC STARS

Nos.	R.A.	Decl.	m_p
	h m s	° ' "	
6740	5 25 19.4	+ 79 48 58	7.26
7606	5 58 15.6	+ 75 35 17	6.52
8711	6 37 44.4	+ 79 37 26	5.60
9073	6 52 48.4	+ 77 02 44	4.75
9201	6 57 26.2	+ 75 18 15	6.85
9338	7 02 18.2	+ 80 37 31	8.5

CLUSTERS OF GALAXIES

Cluster	Character	Population	Diameter in cm	Distance	Number on chart
0453.2 + 7955	medium compact	170	9.8	MD	1
0601.9 + 7617	compact	48	1.5	ED	10
0603.0 + 7922	open	151	15.5	Near	2
0613.3 + 7658	open	83	3.4	VD	9
0627.9 + 7540	medium compact	84	2.3	VD	8
0633.0 + 7516	medium compact	117	2.4	VD	7
0635.0 + 7917	medium compact	80	2.2	VD	6
0635.3 + 7547	medium compact	70	1.4	ED	5
0702.5 + 7752	compact	44	1.1	ED	11
0703.7 + 7618	medium compact	59	1.0	ED	12
0719.0 + 7910	open	147	8.4	D	3
0726.2 + 7900	compact	54	0.9	ED	4

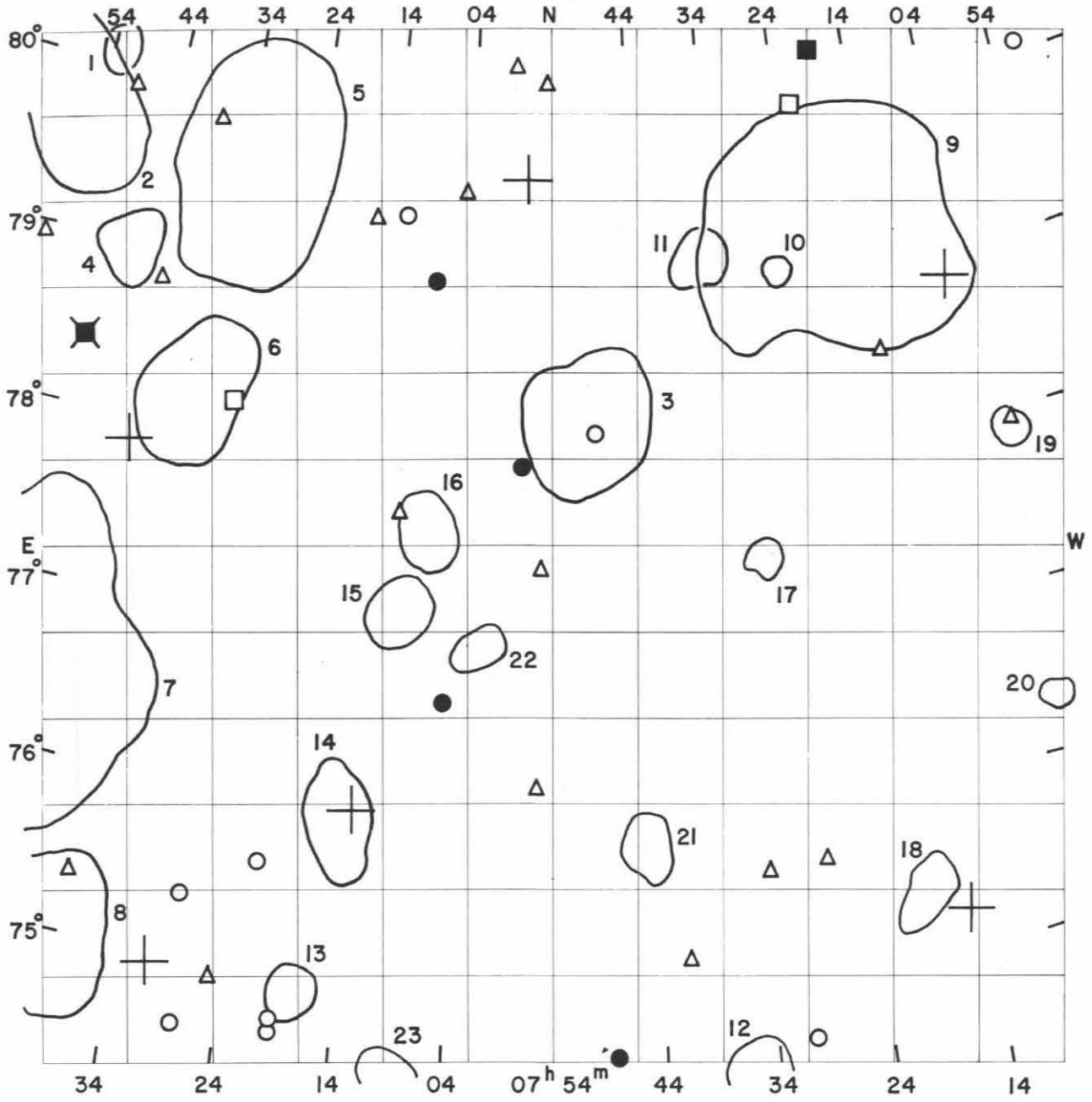
Average number of galaxies per cluster = 92.3

GALAXIES

Position α 1950 h m	Position δ 1950 o '	NGC IC*	m_p	V_s km/sec	Remarks
5 30.0	+ 79 33		15.3		
5 32.1	+ 77 17		15.6		
5 36.0	+ 79 34		15.7		
5 36.7	+ 79 13		15.4		
5 37.4	+ 75 36		15.3		
5 38.7	+ 79 37		14.7		
5 42.7	+ 79 41		14.8		
5 51.0	+ 78 30		15.0		
5 56.0	+ 80 08		15.1		
6 01.3	+ 79 56		15.0		
6 01.9	+ 79 52		15.6		
6 05.0	+ 80 01		15.2		
6 05.0	+ 80 29		15.5		
6 06.0	+ 80 28		15.1		
6 09.0	+ 75 58		14.4		
6 10.0	+ 80 05	440*	14.3		
6 10.5	+ 78 22	2146	11.1	+ 785	m_H = 11.6 S
6 11.9	+ 76 50		13.6		
6 15.6	+ 78 33		14.2		
6 17.0	+ 80 32		15.5		
6 18.2	+ 77 54		15.7		
6 19.0	+ 77 26		15.4		
6 26.1	+ 75 55		15.5		
6 39.4	+ 79 25		15.7		
6 44.0	+ 80 56		15.6		diffuse
6 45.9	+ 77 28		14.8		
6 50.0	+ 80 04		14.4		
6 59.1	+ 75 32		14.9		
7 02.0	+ 77 57		15.7		
7 02.2	+ 75 27	2174*	15.0		
7 03.6	+ 74 59		15.5		
7 03.7	+ 75 25	2314	13.1	+3897	m_H = 12.9
7 15.2	+ 78 29		15.6		
7 18.0	+ 80 16	2336	11.3	+2252	m_H = 12.4 S
7 21.7	+ 79 58	467*	12.7		

MAGNITUDES AND TYPES FROM OTHER SOURCES

NGC IC*	Bigay 1951		Pettit 1954		Humason, Mayall, Sandage 1956		Holmberg 1958	
2146	9.8	Irr.	11.44	Sap	11.3	Sap	11.26	Sp
2314	-	-	13.33	E3	13.3	E3	-	-
2336	-	-	11.37	Sb	11.2	Sbc	11.03	Sc-



FIELD No. 349

7^h54^m $+77^\circ30'$

Survey Plate No. 1295

GC STARS

Nos.	R.A.	Decl.	m_p
	h m s	° ′ ″	
9434	7 05 59.6	+ 78 50 07	6.91
9705	7 15 20.5	+ 75 11 01	7.02
10808	7 57 01.0	+ 79 37 14	5.33
11246	8 13 19.0	+ 75 54 46	5.73
11730	8 31 02.7	+ 74 53 49	6.28
12019	8 41 36.5	+ 77 52 22	7.64

CLUSTERS OF GALAXIES

Cluster	Character	Population	Diameter in cm	Distance	Number on chart
0702.5 + 7752	compact	44	1.1	ED	19
0703.7 + 7618	medium compact	59	1.0	ED	20
0719.0 + 7910	open	147	8.4	D	9
0719.2 + 7518	open	67	1.9	ED	18
0726.2 + 7900	compact	54	0.9	ED	10
0731.4 + 7721	compact	48	1.1	ED	17
0735.7 + 7421	compact	83	2.2	VD	12
0735.8 + 7906	medium compact	87	1.8	ED	11
0744.9 + 7543	open	56	1.9	ED	21
0749.8 + 7810	medium compact	106	4.4	VD	3
0802.0 + 7652	compact	67	1.5	ED	22
0807.5 + 7731	medium compact	79	2.1	VD	16
0807.9 + 7417	open	101	2.3	ED	23
0810.2 + 7703	open	73	2.2	ED	15
0814.6 + 7549	open	88	2.8	VD	14
0817.7 + 7447	medium compact	67	1.7	VD	13
0832.3 + 7935	medium compact	155	6.6	MD	5
0835.0 + 7812	medium compact	131	4.1	D	6
0840.1 + 7457	open	105	4.6	D	8
0845.0 + 7631	open	221	8.1	MD	7
0845.8 + 7858	open	117	2.1	VD	4
0853.0 + 8003	medium compact	63	1.3	VD	1
0859.2 + 7945	medium compact	234	5.5	D	2

Average number of galaxies per cluster = 97.9

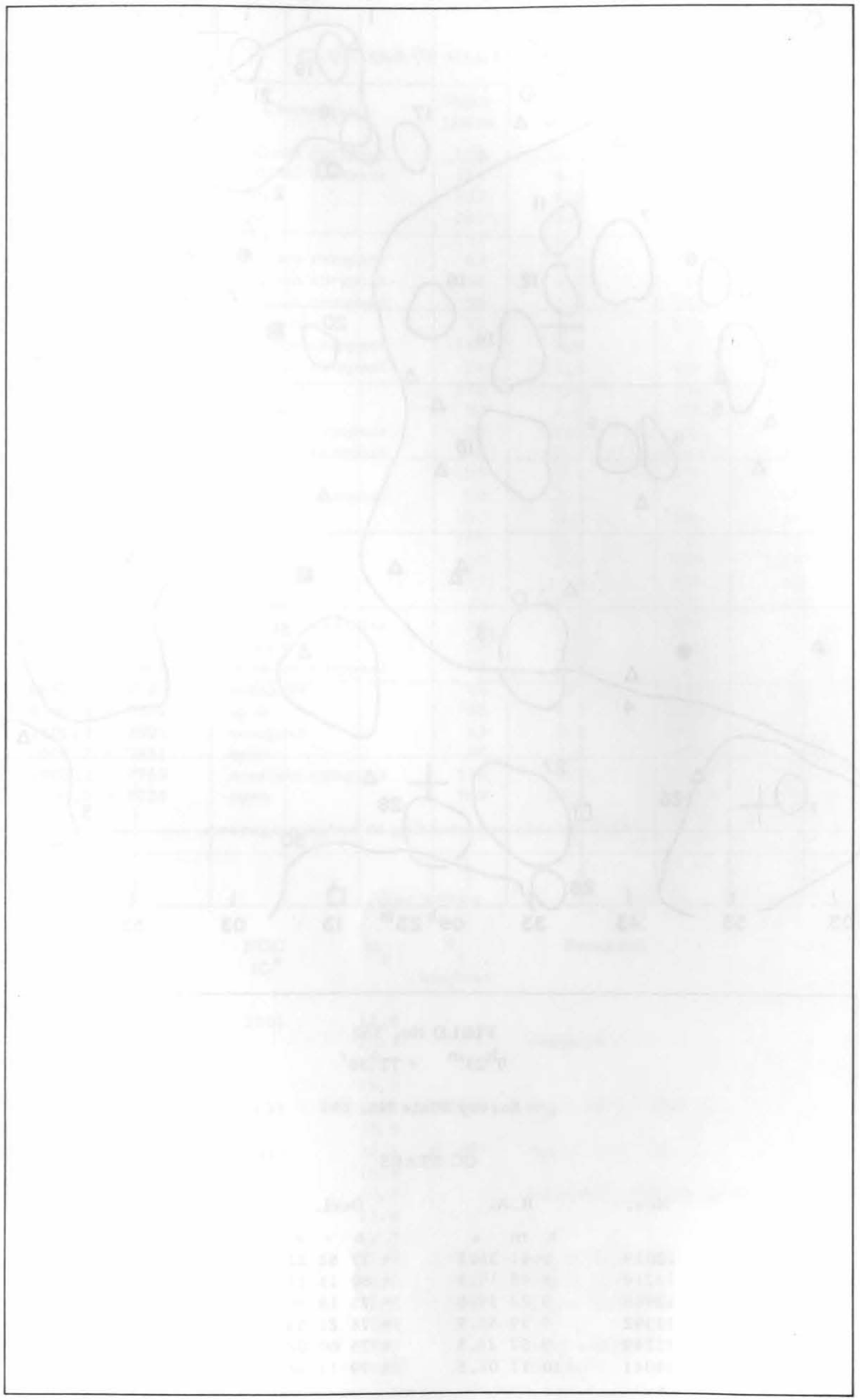
GALAXIES

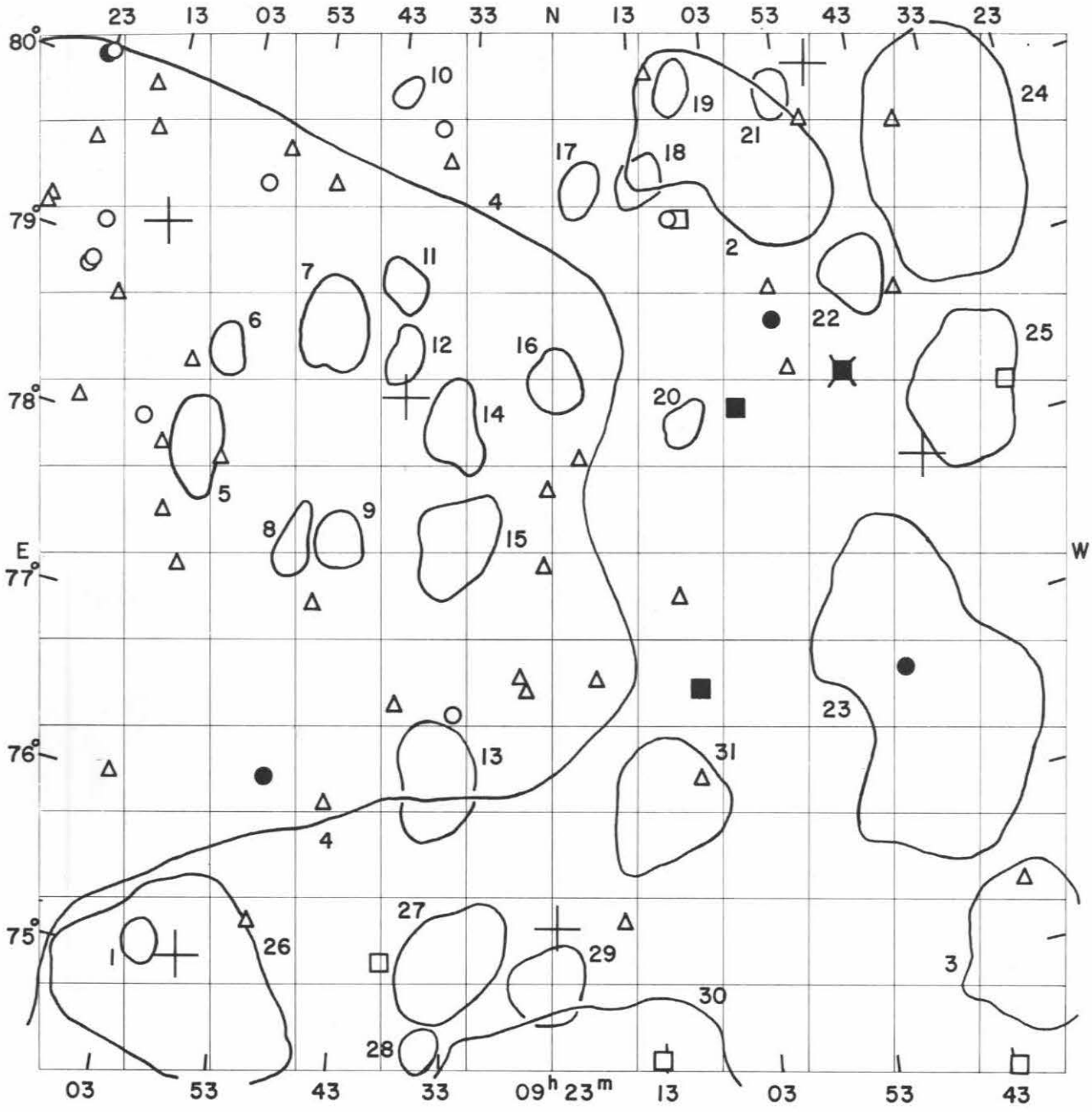
Position α 1950 h m	Position δ o ′	NGC IC*	m_p	V_s km/sec	Remarks
6 50.0	+ 80 04		14.4		
7 02.0	+ 77 57		15.7		
7 15.2	+ 78 29		15.6		
7 18.0	+ 80 16	2336	11.3	+ 2252	m_H = 12.4 S
7 21.7	+ 79 58	467*	12.7		
7 27.9	+ 75 36		15.6		
7 30.4	+ 74 34		14.8		interacting double system
7 33.4	+ 75 33		15.3		
7 41.2	+ 75 05		15.5		
7 48.0	+ 74 32		13.4		
7 49.0	+ 78 08		14.2		
7 55.0	+ 80 10		15.6		
7 55.2	+ 77 21		15.6		
7 55.6	+ 76 05		15.5		
7 57.0	+ 77 58		13.1		
7 59.0	+ 80 15		15.7		diffuse irregular
8 04.7	+ 79 31		15.1		
8 05.0	+ 76 35		13.5		
8 08.0	+ 79 00		14.0		
8 10.8	+ 77 40		15.1		
8 12.2	+ 79 23		14.6		
8 16.0	+ 79 20		15.5		diffuse spiral
8 19.3	+ 74 36		14.9		
8 19.4	+ 74 40		14.7		
8 22.0	+ 75 34		14.8		

Position α 1950 h m	Position δ 1950 ° ′	NGC IC*	m_p	V_s km/sec	Remarks
8 24.9	+ 74 51		15.4		
8 28.0	+ 74 35		14.3		
8 28.4	+ 75 20		14.5		double system
8 30.6	+ 78 12	2591	12.8		
8 37.9	+ 79 47		15.5		compact
8 39.2	+ 75 21		15.7		
8 41.5	+ 78 50		15.7		
8 49.0	+ 78 25	2655	10.8	+ 1299	m_H = 11.6 Sa
8 49.8	+ 79 53		15.4		
8 56.6	+ 78 57		15.4		

MAGNITUDES AND TYPES FROM OTHER SOURCES

NGC IC*	Bigay 1951		Pettit 1954		Humason, Mayall, Sandage 1956		Holmberg 1958	
2336	-	-	11.37	Sb	11.2	Sbc	11.03	Sc-
2655	-	-	11.11	S0	10.8	S0p	10.92	Sa





FIELD No. 350

9^h23^m $+77^o30'$

Survey Plate No. 693

GC STARS

Nos.	R.A.	Decl.	m_p
	h m s	o ' "	
12019	8 41 36.5	+ 77 52 22	7.64
12214	8 48 19.3	+ 80 13 12	7.47
12988	9 22 39.8	+ 75 18 56	6.29
13392	9 39 55.9	+ 78 21 53	6.41
13749	9 57 22.3	+ 75 00 02	7.09
14041	10 11 08.5	+ 79 11 44	6.72

CLUSTERS OF GALAXIES

Cluster	Character	Population	Diameter in cm	Distance	Number on chart
0832.3 + 7935	medium compact	155	6.6	MD	24
0835.0 + 7812	medium compact	131	4.1	D	25
0840.1 + 7457	open	105	4.6	D	3
0845.0 + 7631	open	221	8.1	MD	23
0845.8 + 7858	open	117	2.1	VD	22
0853.0 + 8003	medium compact	63	1.3	VD	21
0859.2 + 7945	medium compact	234	5.5	D	2
0907.0 + 8009	medium compact	98	1.3	ED	19
0908.0 + 7812	compact	71	1.3	ED	20
0911.8 + 7602	medium compact	148	3.9	D	31
0912.1 + 7937	medium compact	61	1.5	VD	18
0919.7 + 7935	compact	122	1.4	VD	17
0922.6 + 7828	compact	92	1.8	ED	16
0923.4 + 7459	medium compact	95	2.3	VD	29
0923.9 + 7353	medium compact	348	11.7	Near	30
0932.6 + 7506	open	100	3.5	VD	27
0933.2 + 7731	medium compact	92	2.8	D	15
0933.8 + 7810	compact	151	2.3	VD	14
0934.3 + 7608	compact	165	3.0	D	13
0934.9 + 7436	open	57	1.2	ED	28
0940.0 + 7835	open	81	1.4	ED	12
0940.6 + 7900	compact	76	1.5	VD	11
0942.0 + 8007	medium compact	53	0.9	ED	10
0946.1 + 7730	compact	84	1.6	D	9
0949.1 + 7845	medium compact	99	2.5	D	7
0951.2 + 7726	compact	83	1.5	VD	8
0957.4 + 7450	open	140	6.7	MD	26
1000.7 + 7503	compact	63	1.2	ED	1
1001.2 + 7831	open	68	1.3	VD	6
1003.2 + 7759	medium compact	124	2.3	ED	5
1021.0 + 7728	open	765	32.2	Near	4

Average number of galaxies per cluster = 137.5

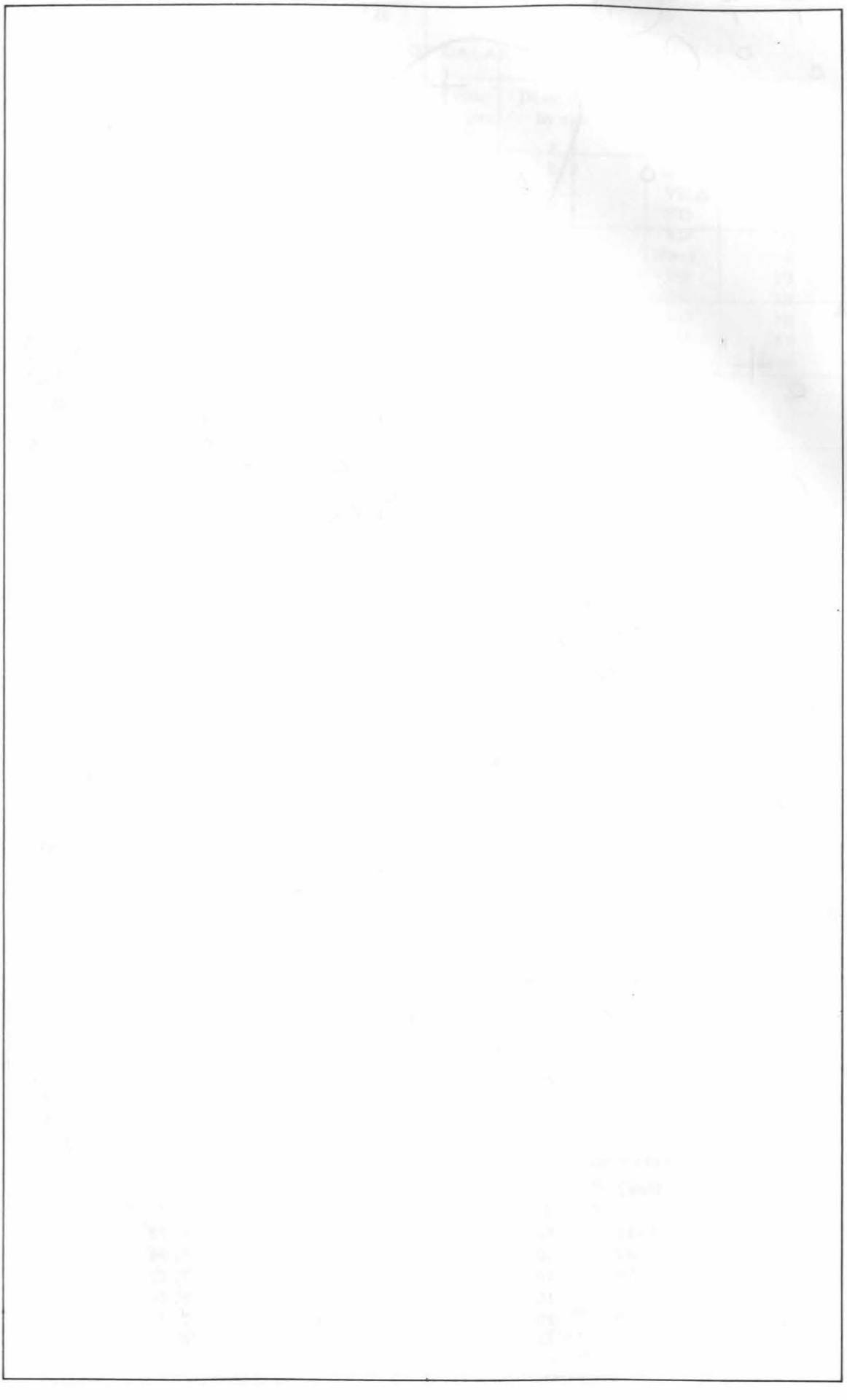
GALAXIES

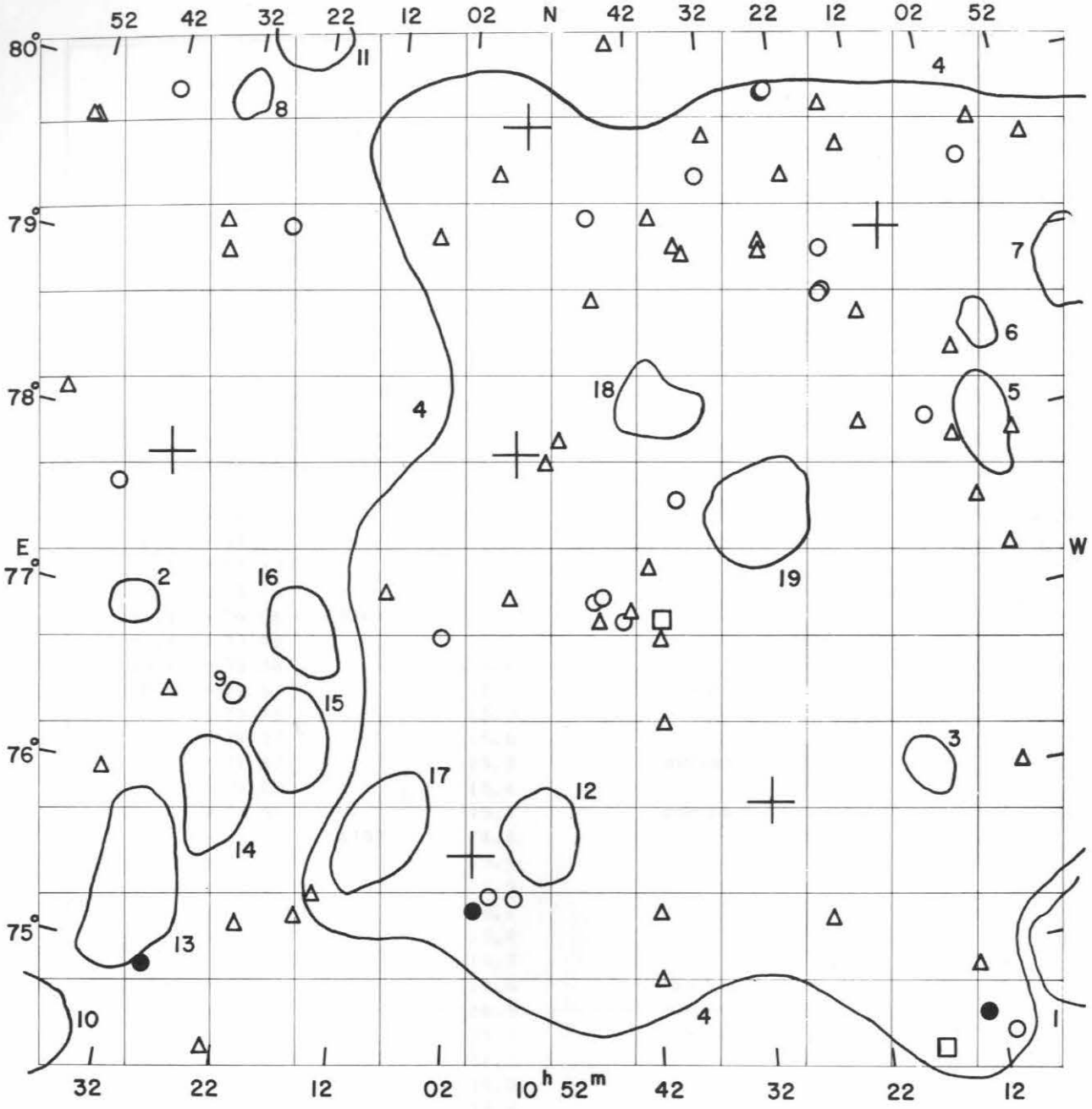
Position α 1950 δ	NGC IC*	m_p	V_s km/sec	Remarks
h m o '				
8 30.6 + 78 12	2591	12.8		
8 37.9 + 79 47		15.5		compact
8 39.2 + 75 21		15.7		
8 41.5 + 78 50		15.7		
8 42.6 + 74 17	2633	12.4	+ 2228	m_H = 12.6 SBc
8 47.1 + 76 41		13.5		
8 49.0 + 78 25	2655	10.8	+ 1299	m_H = 11.6 Sa
8 49.8 + 79 53		15.4		
8 55.6 + 78 29		15.7		extremely diffuse spiral
8 56.6 + 78 57		15.4		
8 56.7 + 78 46		13.7		
9 01.9 + 78 17	2715	11.9	+ 1158	m_H = 12.1 Sb
9 07.1 + 79 24	2732	12.6	+ 2121	m_H = 13.0
9 08.0 + 76 41	2748	11.7	+ 1489	m_H = 12.4 Sb
9 08.5 + 79 25		15.0		
9 08.6 + 76 09		15.7		very compact
9 09.7 + 77 13		15.2		compact

Position α 1950 h m	Position δ o ′	NGC IC*	m_p	V_s km/sec	Remarks
9 10.0	+ 80 15		15.3		diffuse
9 13.1	+ 74 33		12.8		
9 16.3	+ 75 21		15.2		diffuse spiral
9 18.7	+ 76 45		15.1		
9 20.0	+ 78 01		15.3		
9 23.8	+ 77 52		15.1		
9 24.0	+ 77 25		15.4		
9 25.6	+ 76 41		15.4		
9 26.3	+ 76 46		15.6		
9 33.0	+ 76 33	2938	14.4		
9 36.1	+ 79 44		15.6		
9 37.4	+ 79 55	2908	14.2		
9 38.8	+ 75 05	2977	12.7		
9 39.0	+ 76 35		15.2		
9 45.3	+ 75 59		15.6		
9 48.2	+ 77 07		15.6		extremely compact
9 51.0	+ 79 32		15.7		
9 51.3	+ 75 15		15.5		
9 51.4	+ 76 06	3061	13.9		
9 57.4	+ 79 43		15.5		very compact
9 59.8	+ 79 30		14.8		
10 00.2	+ 77 53		15.7		compact
10 03.0	+ 77 15		15.5		
10 05.2	+ 78 25		15.6		
10 05.5	+ 77 32		15.5		diffuse spiral
10 06.2	+ 76 00		15.4		
10 06.9	+ 77 55		15.7		compact
10 09.5	+ 78 03	3197	14.5		
10 15.0	+ 79 42		15.6		
10 15.4	+ 78 42		15.5		
10 16.5	+ 79 56		15.7		
10 17.2	+ 78 04		15.4		
10 19.0	+ 79 07		14.7		
10 19.5	+ 78 52		14.4		faint halo + streamers
10 19.8	+ 78 51		14.5		eccentric nucleus
10 22.7	+ 79 33		15.3		compact
10 23.0	+ 80 03	3212	14.3		
10 24.0	+ 80 02	3215	14.0		
10 26.1	+ 79 10		15.6		
10 26.3	+ 79 07		15.5		very diffuse

MAGNITUDES AND TYPES FROM OTHER SOURCES

NGC IC*	Bigay 1951		Pettit 1954		Humason, Mayall, Sandage 1956		Holmberg 1958	
2633	-	-	13.00	SBc	12.8	SBb	-	-
2655	-	-	11.11	S0	10.8	S0p	10.92	Sa
2715	-	-	12.08	Sc	11.9	Sc	11.87	Sc-
2732	-	-	13.17	S0	12.7	S0	-	-
2748	-	-	12.54	Sb	12.3	Sc	-	-
2977	-	-	-	-	-	-	13.25	S
3061	-	-	-	-	-	-	13.44	Sc-





FIELD No. 351

10^h52^m $+77^\circ30'$

Survey Plate No. 1326

GC STARS

Nos.	R.A. h m s	Decl. ° ' "	m_p
14041	10 11 08.5	+ 79 11 44	6.72
14507	10 30 54.1	+ 75 58 17	5.04
15059	10 55 05.8	+ 79 56 37	7.23
15077	10 56 00.8	+ 78 02 19	6.26
15165	10 59 49.1	+ 75 42 40	7.22
15932	11 34 36.7	+ 77 52 21	6.71

CLUSTERS OF GALAXIES

Cluster	Character	Population	Diameter in cm	Distance	Number on chart
0949.1 + 7845	medium compact	99	2.5	D	7
0957.4 + 7450	open	140	6.7	MD	1
1001.2 + 7831	open	68	1.3	VD	6
1003.2 + 7759	medium compact	124	2.3	ED	5
1014.6 + 7604	medium compact	73	1.6	VD	3
1021.0 + 7728	open	765	32.2	Near	4
1029.3 + 7739	open	87	3.3	VD	19
1039.9 + 7819	medium compact	190	2.3	ED	18
1052.7 + 7550	medium compact	106	2.6	VD	12
1108.3 + 7550	medium compact	86	3.1	VD	17
1117.7 + 7655	medium compact	102	2.4	VD	16
1118.0 + 7617	open	88	2.7	ED	15
1123.9 + 7631	compact	45	0.6	ED	9
1124.7 + 7557	medium compact	118	2.8	VD	14
1126.0 + 8022	open	60	2.2	VD	11
1131.1 + 7520	medium compact	100	4.0	D	13
1133.0 + 8000	medium compact	60	1.3	ED	8
1135.7 + 7658	medium compact	56	1.4	ED	2
1139.7 + 7423	medium compact	93	3.6	D	10

Average number of galaxies per cluster = 129.5

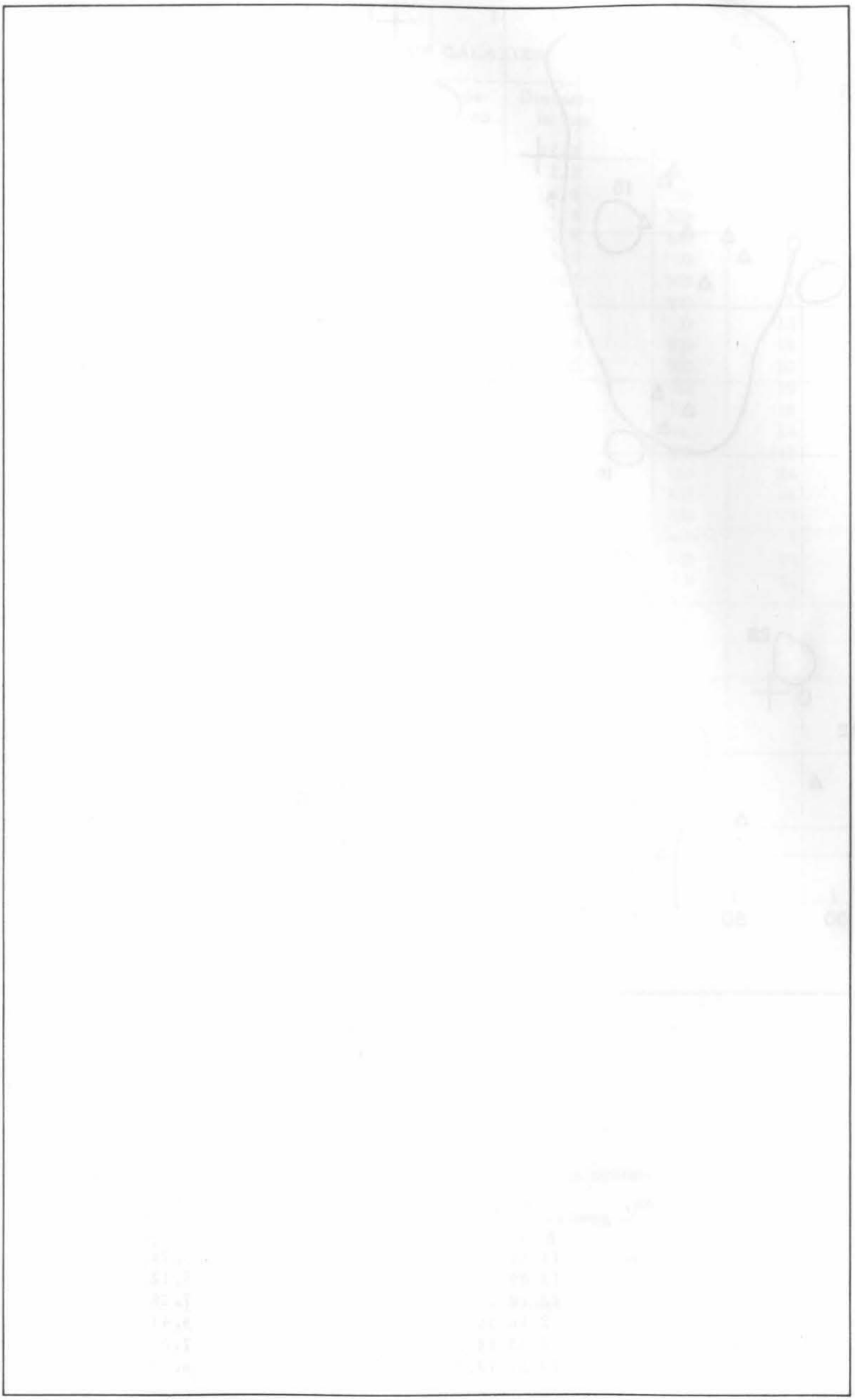
GALAXIES

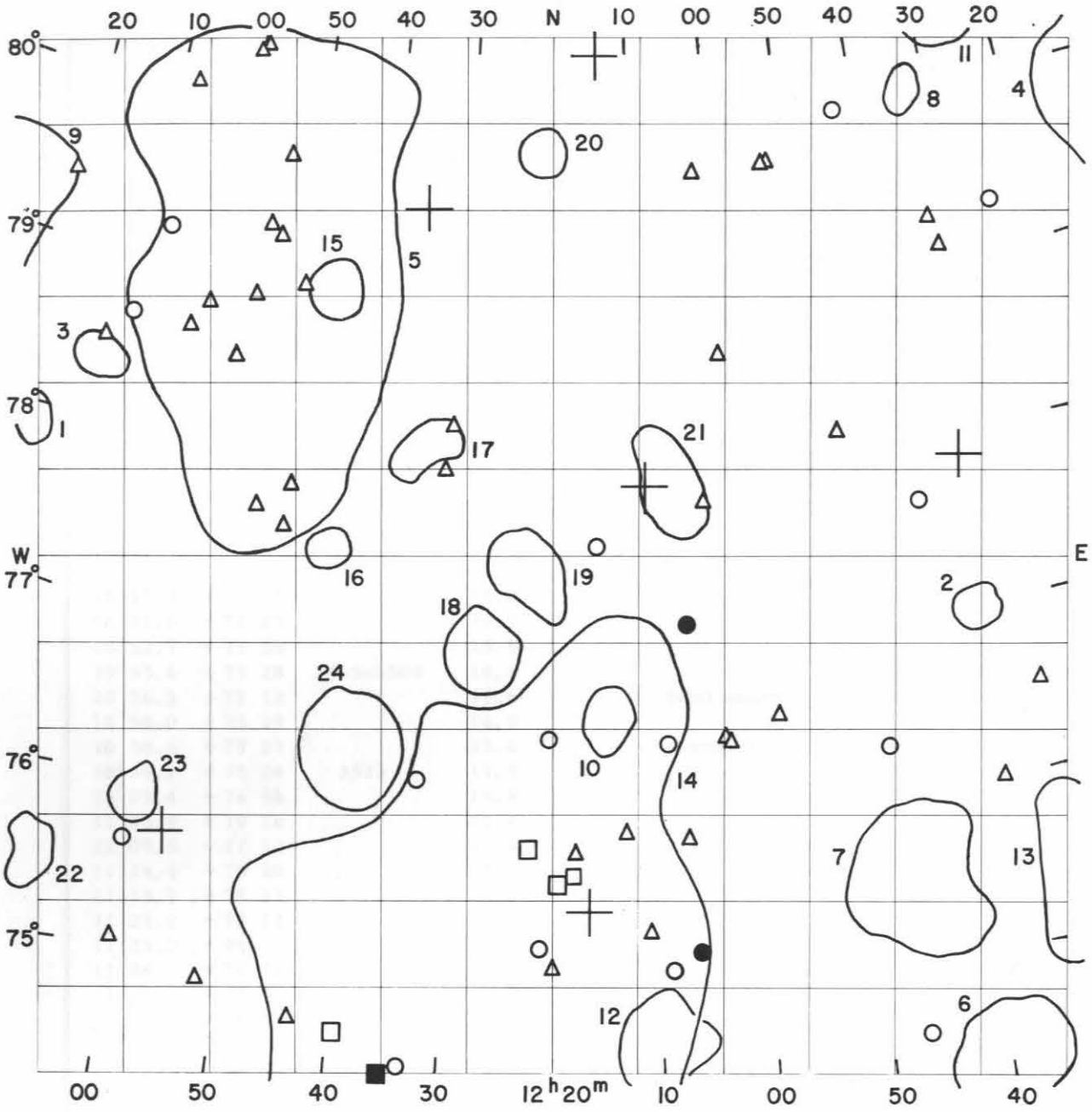
Position α 1950 h m	Position δ o ′	NGC IC*	m_p	V_s km/sec	Remarks
9 51.0	+ 79 32		15.7		
9 57.4	+ 79 43		15.5		very compact
9 59.8	+ 79 30		14.8		
10 00.2	+ 77 53		15.7		compact
10 03.0	+ 77 15		15.5		
10 05.2	+ 78 25		15.6		
10 05.5	+ 77 32		15.5		diffuse spiral
10 06.2	+ 76 00		15.4		
10 06.9	+ 77 55		15.7		compact
10 09.5	+ 78 03	3197	14.5		
10 11.2	+ 74 29	3144=3174	14.3		
10 13.2	+ 74 36	3155=3194	13.9		
10 13.5	+ 74 53		15.7		very compact
10 15.0	+ 79 42		15.6		
10 15.4	+ 78 42		15.5		
10 16.5	+ 79 56		15.7		
10 17.2	+ 78 04		15.4		
10 17.5	+ 74 26	3183=3218	12.5		
10 19.0	+ 79 07		14.7		
10 19.5	+ 78 52		14.4		faint halo + streamers
10 19.8	+ 78 51		14.5		eccentric nucleus
10 22.7	+ 79 33		15.3		compact
10 23.0	+ 80 03	3212	14.3		
10 24.0	+ 80 02	3215	14.0		
10 26.0	+ 75 16		15.2		
10 26.1	+ 79 10		15.6		
10 26.3	+ 79 07		15.5		very diffuse
10 32.3	+ 79 50		15.6		diffuse spiral
10 33.5	+ 79 38		14.9		faint jets

Position α 1950 h m	Position δ o '	NGC IC*	m_p	V_s km/sec	Remarks
10 35.7	+ 79 10		15.7		very compact
10 36.8	+ 79 13		15.7		compact
10 38.3	+ 77 46		15.0		
10 39.7	+ 79 23		15.5		very compact
10 40.4	+ 77 05	3329=3397	12.9		m_H = 12.9 E
10 40.7	+ 76 28		15.3		
10 40.8	+ 76 58		15.1		
10 41.6	+ 77 22		15.2		
10 41.8	+ 75 22		15.6		
10 42.0	+ 75 00		15.4		
10 43.6	+ 77 07		15.3		
10 44.4	+ 77 05		15.0		
10 45.0	+ 80 26		15.6		compact
10 46.5	+ 77 13		14.4		
10 47.0	+ 77 04		15.1		
10 47.1	+ 78 55		15.6		
10 47.4	+ 77 12		14.9		
10 47.7	+ 79 25		14.3		triple system, halo
10 51.0	+ 78 07		15.7		
10 52.7	+ 77 59		15.5		
10 55.6	+ 75 28	3465=3500	14.6		
10 56.3	+ 77 12		15.6		faint annex
10 58.0	+ 75 29		14.8		
10 58.6	+ 79 39		15.6		compact
10 59.2	+ 75 24	3523	13.8		
11 03.4	+ 76 58		14.8		
11 05.9	+ 79 16		15.4		
11 09.5	+ 77 12		15.4		
11 14.4	+ 75 20		15.5		
11 15.9	+ 75 17		15.7		
11 21.2	+ 75 12		15.7		faint jets
11 23.0	+ 74 28		15.6		
11 24.6	+ 79 16		14.7		eruptive galaxy
11 29.1	+ 74 54	3752	13.7		
11 30.8	+ 76 31		15.7		
11 32.1	+ 79 05		15.6		
11 32.8	+ 79 15		15.6		compact
11 36.1	+ 76 00		15.7		
11 40.0	+ 77 40	3901	14.6		
11 42.5	+ 79 58		14.8		
11 47.0	+ 78 07		15.2		
11 52.4	+ 79 43		15.3		
11 52.7	+ 79 43		15.6		

MAGNITUDES AND TYPES FROM OTHER SOURCES

NGC IC*	Bigay 1951		Pettit 1954		Humason, Mayall, Sandage 1956		Holmberg 1958	
3183	-	-	-	-	-	-	12.59	Sb+





FIELD No. 352

12^h20^m $+77^\circ30'$

Survey Plate No. 1339

GC STARS

Nos.	R.A.	Decl.	m_p
	h m s	° ' "	
15932	11 34 36.7	+ 77 52 21	6.71
16672	12 09 52.8	+ 77 53 38	5.12
16756	12 14 03.3	+ 80 24 11	7.28
16797	12 16 36.5	+ 75 26 17	5.41
17208	12 35 44.2	+ 79 29 25	7.03
17637	12 57 18.7	+ 75 44 30	6.19

CLUSTERS OF GALAXIES

Cluster	Character	Population	Diameter in cm	Distance	Number on chart
1021.0 + 7728	open	765	32.2	Near	4
1126.0 + 8022	open	60	2.2	VD	11
1131.1 + 7520	medium compact	100	4.0	D	13
1133.0 + 8000	medium compact	60	1.3	ED	8
1135.7 + 7658	medium compact	56	1.4	ED	2
1139.7 + 7423	medium compact	93	3.6	D	6
1145.5 + 7528	medium compact	96	4.7	VD	7
1207.0 + 7752	medium compact	89	2.7	VD	21
1209.9 + 7440	medium compact	101	2.9	D	12
1214.5 + 7633	medium compact	72	1.8	ED	10
1221.3 + 7950	medium compact	82	1.5	ED	20
1222.5 + 7723	open	91	2.6	VD	19
1227.0 + 7655	compact	75	2.5	VD	18
1230.3 + 7450	open	207	17.6	Near	14
1234.1 + 7805	medium compact	100	1.8	ED	17
1240.0 + 7621	medium compact	108	3.5	VD	24
1244.0 + 7729	compact	49	1.3	ED	16
1246.4 + 7859	medium compact	55	1.8	ED	15
1255.6 + 7858	open	141	12.0	Near	5
1300.2 + 7554	medium compact	55	1.6	ED	23
1309.2 + 7529	open	55	1.8	ED	22
1313.1 + 7823	compact	73	1.5	ED	3
1319.0 + 7756	medium compact	63	1.3	ED	1
1342.5 + 7841	open	135	11.7	Near	9

Average number of galaxies per cluster = 115.9

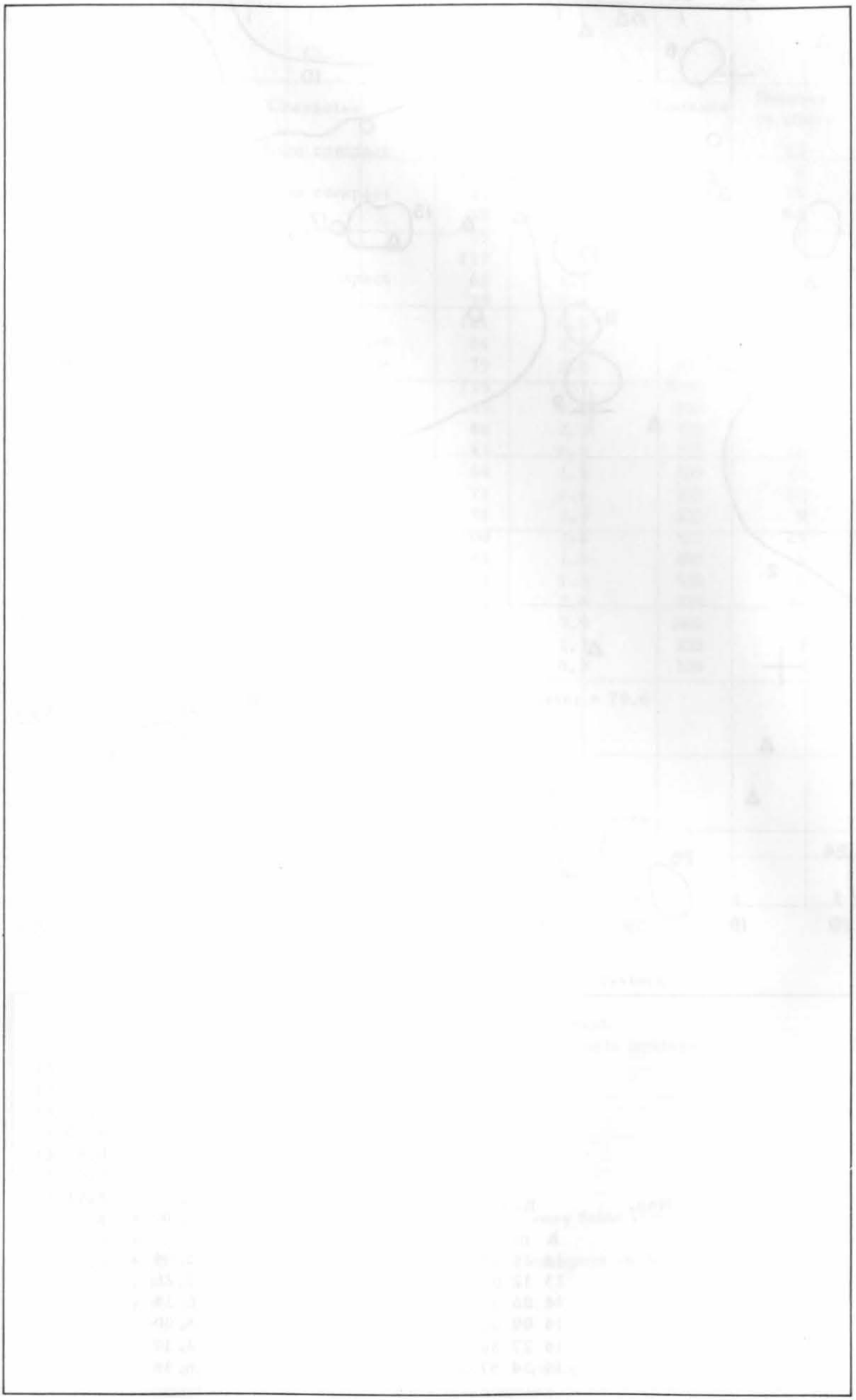
GALAXIES

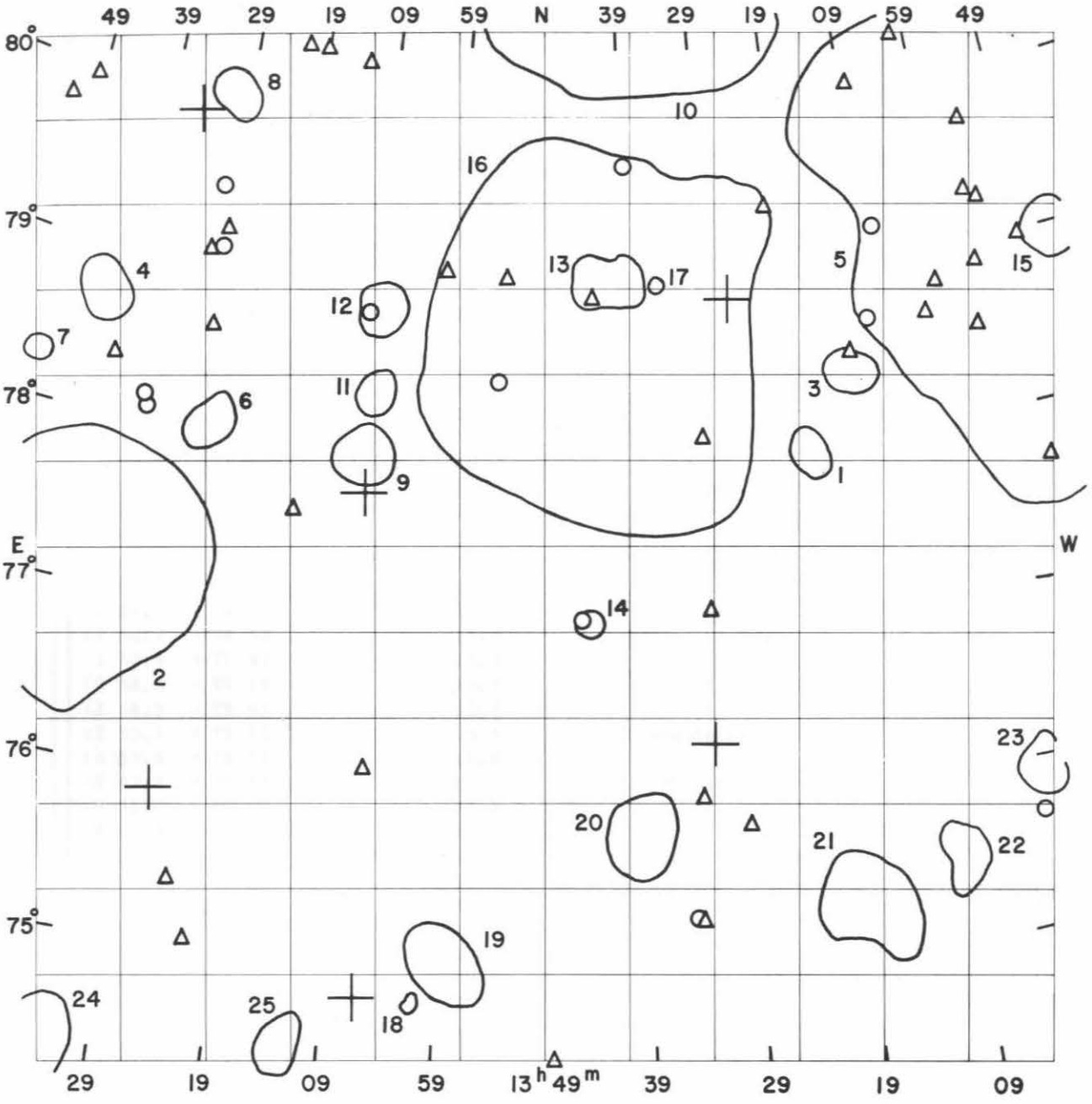
Position α 1950 h m	Position δ o '	NGC IC*	m_p	V_s km/sec	Remarks
11 24.6	+ 79 16		14.7		eruptive galaxy
11 30.8	+ 76 31		15.7		
11 32.1	+ 79 05		15.6		
11 32.8	+ 79 15		15.6		compact
11 36.1	+ 76 00		15.7		
11 40.0	+ 77 40	3901	14.6		
11 42.5	+ 79 58		14.8		
11 46.6	+ 74 36	3890	14.1		
11 46.6	+ 76 17		14.9		
11 47.0	+ 78 07		15.2		
11 52.4	+ 79 43		15.3		
11 52.7	+ 79 43		15.6		
11 57.2	+ 76 32		15.3		
12 00.4	+ 78 38		15.7		
12 01.8	+ 79 42		15.4		double system
12 02.1	+ 76 25		15.7		
12 02.4	+ 76 26		15.4		very long jets
12 03.2	+ 77 47		15.4		
12 06.0	+ 77 05	4127	13.5		
12 06.2	+ 75 12	4133	13.1		
12 07.0	+ 75 52		15.6		very compact
12 08.3	+ 76 25	4159	14.3		
12 08.8	+ 75 06		14.8		
12 10.9	+ 75 20		15.4		extremely diffuse spiral

Position α 1950 h m	Position δ o '	NGC IC*	m_p	V_s km/sec	Remarks
12 12.9	+ 75 55		15.3		
12 15.2	+ 77 34		15.0		
12 17.8	+ 75 47		15.2		
12 18.0	+ 75 40	4291	12.3	+ 1844	m_H = 12.5 E
12 19.5	+ 75 37	4319	13.0		
12 20.0	+ 75 07		15.1		very compact
12 20.3	+ 76 28	4331	14.8		
12 21.2	+ 75 14	4363	14.6		
12 22.1	+ 75 49	4386	12.6	+ 1811	m_H = 12.8 E
12 31.2	+ 78 15		15.6		
12 31.9	+ 77 59		15.5		
12 33.3	+ 76 12		14.7		
12 33.9	+ 74 31	4572	14.9		
12 35.4	+ 74 28	4589	12.0	+ 1825	m_H = 12.1 E
12 39.9	+ 74 43	4648	12.6		
12 43.9	+ 74 46		15.4		
12 49.0	+ 77 49		15.4		
12 49.2	+ 77 35		15.7		
12 50.0	+ 78 59		15.6		compact
12 52.1	+ 74 55		15.5		very compact
12 52.4	+ 77 41		15.5		
12 53.8	+ 79 15		15.7		
12 54.0	+ 79 43		15.5		
12 55.1	+ 79 18		15.5		double system
12 55.8	+ 78 53		15.6		
12 57.3	+ 78 31		15.7		compact
13 00.0	+ 80 19		15.4		
13 00.3	+ 75 05		15.7		
13 00.8	+ 75 40	4954=4972	14.2		quadruple system
13 01.0	+ 80 17		15.3		
13 01.3	+ 78 48		15.2		
13 03.1	+ 78 38		15.5		
13 07.6	+ 79 12		14.7		
13 08.0	+ 80 02		15.5		
13 10.0	+ 78 40		15.0		
13 12.5	+ 78 30		15.7		
13 20.8	+ 79 24		15.6		very faint streamers

MAGNITUDES AND TYPES FROM OTHER SOURCES

NGC IC*	Bigay 1951		Pettit 1954		Humason, Mayall, Sandage 1956		Holmberg 1958	
4291	-	-	-	-	12.4	E2	-	-
4386	-	-	-	-	-	E5	-	-
4589	-	-	-	-	12.0	E1	-	-





FIELD No. 353

13^h49^m $+77^o30'$

Survey Plate No. 1374

GC STARS

Nos.	R.A.	Decl.	m_p
	h m s	o ' "	
18223	13 26 30.0	+ 78 54 07	5.94
18347	13 32 00.1	+ 76 19 07	7.26
19097	14 06 31.6	+ 74 49 49	6.34
19142	14 09 00.6	+ 77 46 57	5.00
19548	14 27 36.3	+ 75 55 06	4.37
19705	14 34 57.3	+ 79 52 37	6.35

CLUSTERS OF GALAXIES

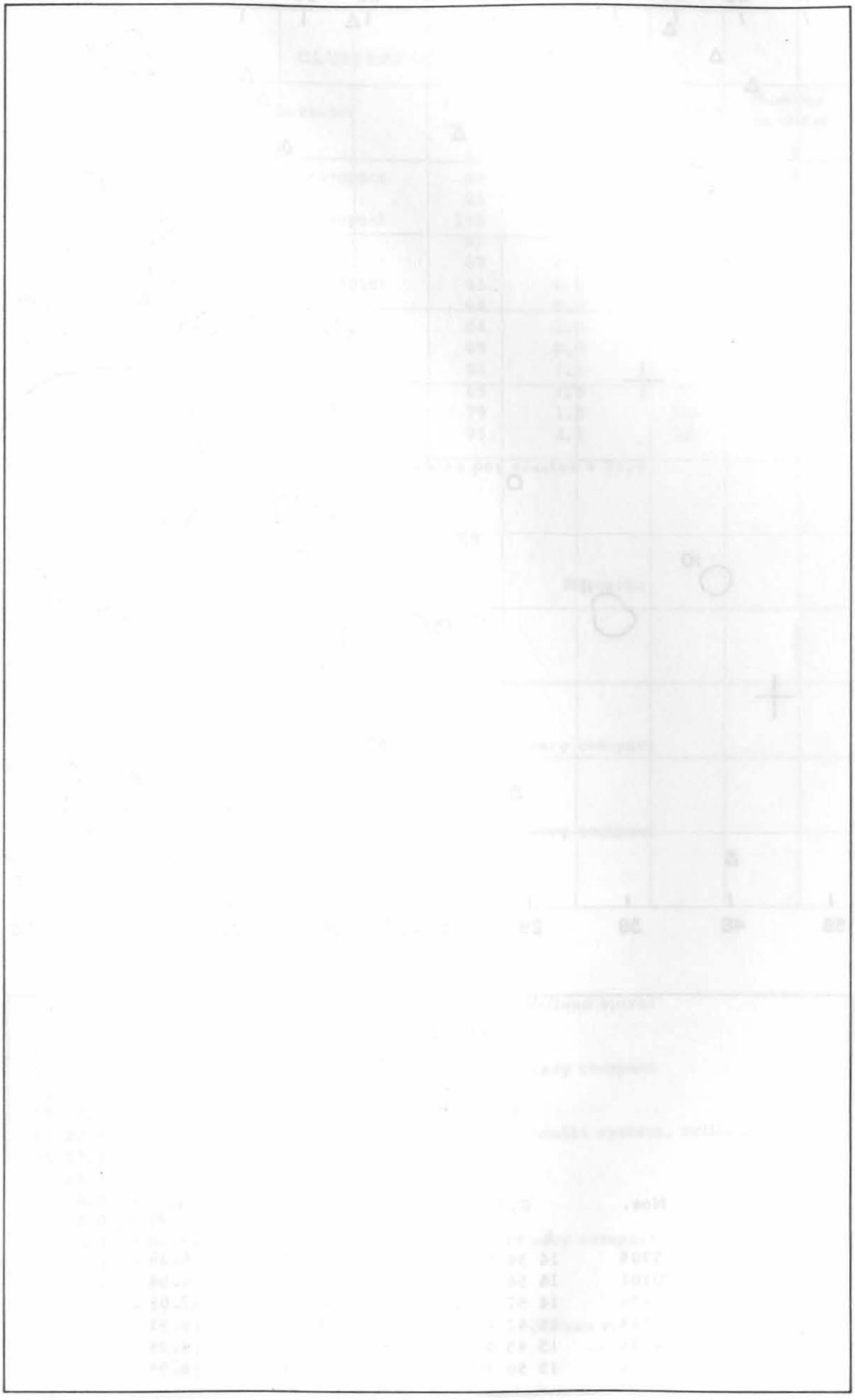
Cluster	Character	Population	Diameter in cm	Distance	Number on chart
1246.4 + 7859	medium compact	55	1.8	ED	15
1255.6 + 7858	open	141	12.0	Near	5
1300.2 + 7554	medium compact	55	1.6	ED	23
1309.2 + 7529	open	55	1.8	ED	22
1313.1 + 7823	compact	73	1.5	ED	3
1318.4 + 7517	open	117	3.3	MD	21
1319.0 + 7756	medium compact	63	1.3	ED	1
1335.3 + 7900	compact	35	0.4	ED	17
1339.0 + 8035	open	121	6.8	MD	10
1339.7 + 7548	medium compact	84	2.5	VD	20
1341.2 + 7902	medium compact	79	2.0	ED	13
1342.5 + 7841	open	135	11.7	Near	16
1344.2 + 7703	compact	45	0.8	ED	14
1358.2 + 7502	compact	88	2.5	VD	19
1401.1 + 7448	compact	45	0.5	ED	18
1408.8 + 7820	compact	64	1.3	ED	11
1409.0 + 7850	medium compact	71	1.6	ED	12
1409.4 + 7758	medium compact	95	1.9	ED	9
1412.4 + 7428	medium compact	100	1.6	ED	25
1427.3 + 7803	open	83	1.6	ED	6
1430.8 + 7959	medium compact	63	1.5	VD	8
1434.3 + 7419	open	63	2.8	VD	24
1438.3 + 7707	medium compact	135	7.9	MD	2
1442.2 + 7842	open	83	1.7	ED	4
1448.4 + 7817	medium compact	43	0.8	ED	7

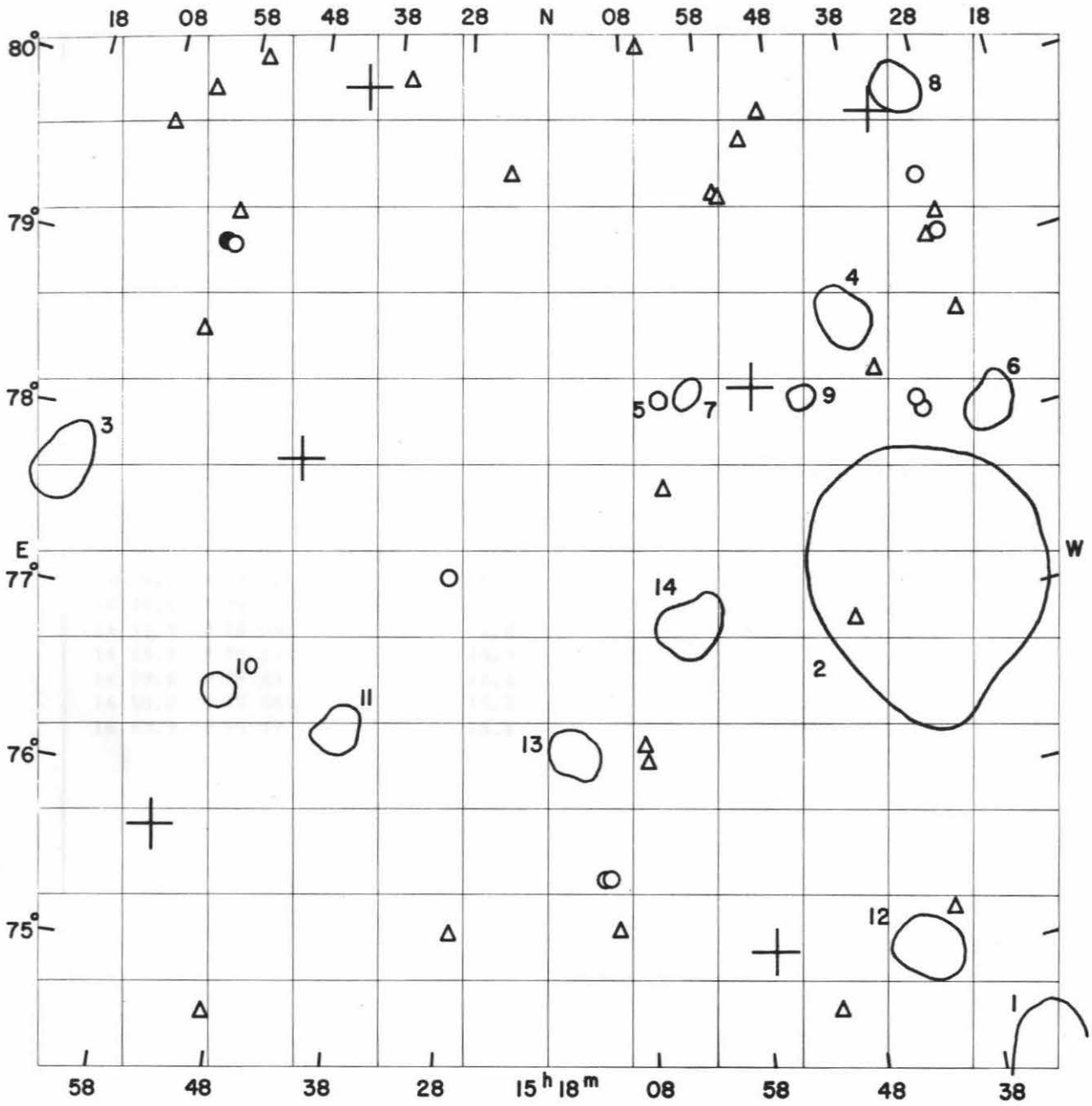
Average number of galaxies per cluster = 79.6

GALAXIES

Position α 1950 h m	Position δ o '	NGC IC*	m_p	V_s km/sec	Remarks
12 50.0	+ 78 59		15.6		compact
12 52.4	+ 77 41		15.5		
12 53.8	+ 79 15		15.7		
12 54.0	+ 79 43		15.5		
12 55.1	+ 79 18		15.5		double system
12 55.8	+ 78 53		15.6		
12 57.3	+ 78 31		15.7		compact
13 00.8	+ 75 40	4954=4972	14.2		quadruple system
13 01.0	+ 80 17		15.3		
13 01.3	+ 78 48		15.2		
13 03.1	+ 78 38		15.5		
13 07.6	+ 79 12		14.7		
13 08.0	+ 80 02		15.5		
13 10.0	+ 78 40		15.0		
13 12.5	+ 78 30		15.7		
13 20.8	+ 79 24		15.6		very faint streamers
13 29.0	+ 75 50		15.3		
13 30.8	+ 78 06		15.2		compact with plume
13 31.3	+ 77 06		15.5		
13 33.4	+ 76 01		15.4		
13 34.1	+ 75 17		15.7		
13 34.6	+ 75 18	5262	15.0		
13 38.6	+ 79 43	5295	14.9		compact

Position α 1950 h m	Position δ o ′	NGC IC*	m_p	V_s km/sec	Remarks
13 43.4	+ 78 56		15.6		
13 45.1	+ 77 05	5323	14.3		
13 48.0	+ 74 30		15.1		
13 53.4	+ 79 03		15.7		
13 54.5	+ 78 28	5452	14.2		
14 00.8	+ 79 05		15.7		diffuse spiral
14 07.0	+ 76 10		15.4		
14 10.2	+ 78 50	5547+4404*	14.5		double system, bridge
14 13.0	+ 80 16		15.6		
14 16.8	+ 77 38		15.6		very compact
14 19.0	+ 80 20		15.3		double system, faint bridge
14 22.0	+ 80 20	5640	15.4		
14 22.3	+ 75 03		15.6		
14 24.5	+ 75 24		15.7		
14 29.0	+ 78 39		15.6		
14 29.0	+ 79 13		15.6		
14 29.3	+ 79 06	4470*	15.0		
14 30.4	+ 79 28		14.9		
14 30.6	+ 79 05	5712	15.3		very compact
14 34.9	+ 78 06		14.8		
14 35.3	+ 78 11		14.9		
14 39.8	+ 78 23		15.2		
14 50.0	+ 79 58		15.2		
14 52.7	+ 79 49		15.4		





FIELD No. 354

15^h18^m $+77^o30'$

Survey Plate No. 768

GC STARS

Nos.	R.A.	Decl.	m_p
	h m s	o ' "	
19705	14 34 57.3	+ 79 52 37	6.35
20101	14 54 11.2	+ 78 22 44	6.54
20176	14 57 08.4	+ 75 06 01	7.07
21163	15 42 18.9	+ 80 08 29	6.93
21243	15 45 47.9	+ 77 56 57	4.34
21454	15 56 10.6	+ 75 43 05	6.94

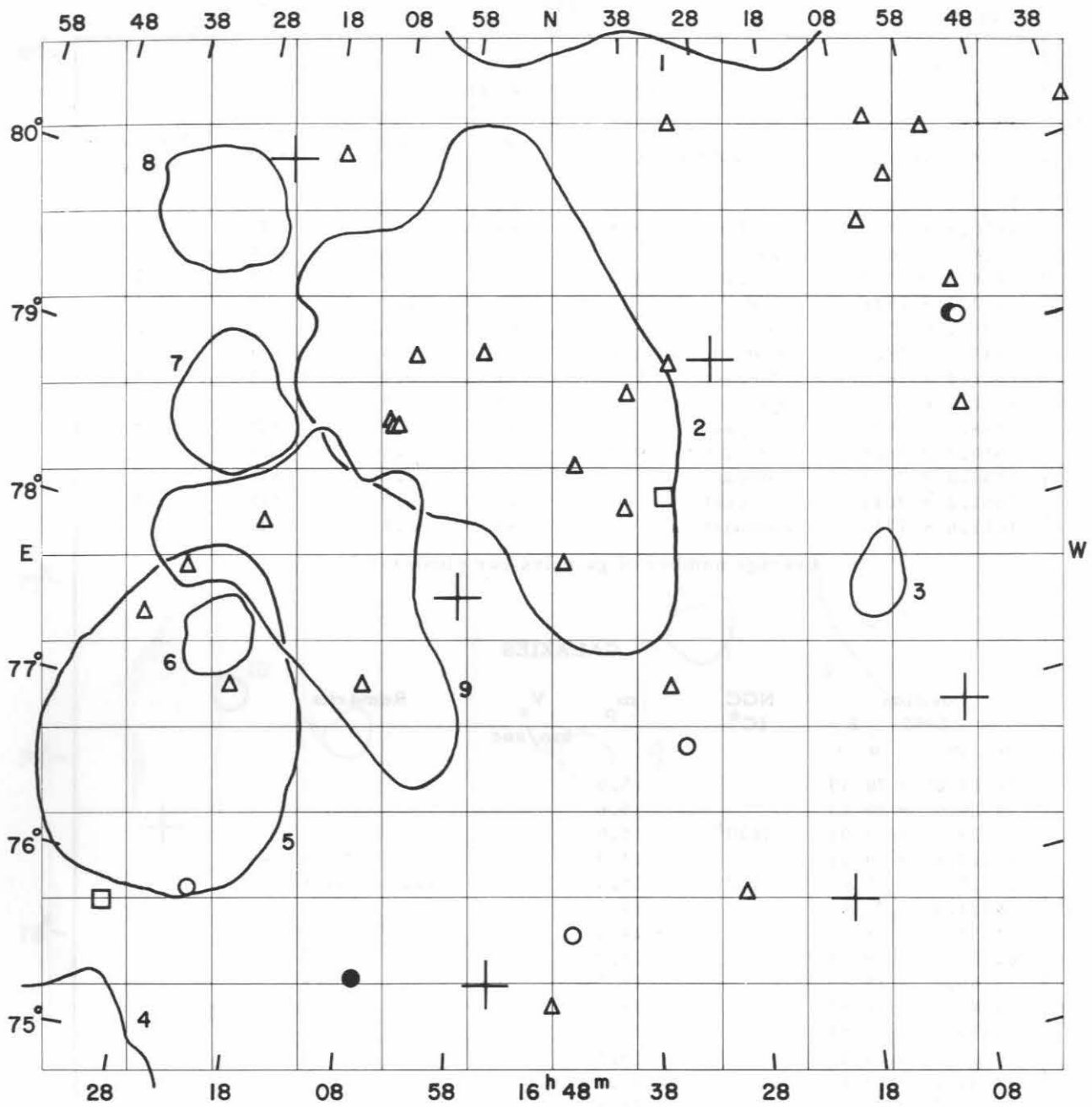
CLUSTERS OF GALAXIES

Cluster	Character	Population	Diameter in cm	Distance	Number on chart
1427.3 + 7803	open	83	1.6	ED	6
1430.8 + 7959	medium compact	63	1.5	VD	8
1434.3 + 7419	open	63	2.8	VD	1
1438.3 + 7707	medium compact	135	7.9	MD	2
1442.2 + 7842	open	83	1.7	ED	4
1443.1 + 7500	compact	69	2.1	ED	12
1448.4 + 7817	medium compact	43	0.8	ED	9
1501.4 + 7822	compact	44	0.9	ED	7
1502.3 + 7701	open	84	2.0	VD	14
1504.9 + 7820	compact	45	0.5	ED	5
1515.3 + 7618	medium compact	53	1.6	VD	13
1538.8 + 7623	compact	69	1.5	VD	11
1551.2 + 7633	compact	79	1.0	ED	10
1611.6 + 7740	compact	93	2.1	VD	3

Average number of galaxies per cluster = 71.9

GALAXIES

Position α 1950 h m	Position δ 1950 ° ′	NGC IC*	m_p	V_s km/sec	Remarks
14 29.0	+ 78 39		15.6		
14 29.0	+ 79 13		15.6		
14 29.3	+ 79 06	4470*	15.0		
14 30.4	+ 79 28		14.9		
14 30.6	+ 79 05	5712	15.3		very compact
14 34.9	+ 78 06		14.8		
14 35.3	+ 78 11		14.9		
14 39.8	+ 78 23		15.2		
14 40.2	+ 75 15		15.7		very compact
14 46.0	+ 76 59		15.6		
14 50.0	+ 79 58		15.2		
14 51.6	+ 74 44		15.4		
14 52.7	+ 79 49		15.4		
14 56.5	+ 79 30		15.6		
14 57.0	+ 79 31		15.5		
15 05.3	+ 77 50		15.7		
15 06.0	+ 80 25		15.4		diffuse spiral
15 08.1	+ 76 15		15.1		
15 08.3	+ 76 21		15.3		
15 11.2	+ 75 17		15.7		very compact
15 12.1	+ 75 20	5909	14.7		
15 12.3	+ 75 20	5912	14.6		
15 22.9	+ 79 41		15.1		double system, collision
15 27.2	+ 75 16		15.7		
15 28.5	+ 77 20		14.6		
15 36.0	+ 80 12		15.6		
15 49.0	+ 74 41		15.5		
15 56.0	+ 80 15		15.7		very compact
15 57.2	+ 79 18		15.5		
15 57.3	+ 79 07		14.7		
15 58.0	+ 79 08	6068	13.3		
15 59.0	+ 78 37		15.7		diffuse spiral
16 03.0	+ 80 00		15.3		
16 08.0	+ 79 45		15.2		



FIELD No. 355

16^h48^m + 78°00'

Survey Plate No. 1433

GC STARS

Nos.	R.A.	Decl.	m_p
	h m s	° ' "	
21676	16 05 08.4	+ 76 55 41	5.60
21999	16 18 56.4	+ 75 52 16	5.04
22205	16 28 27.7	+ 79 04 20	5.54
22843	16 54 27.3	+ 75 28 20	6.84
22940	16 58 31.1	+ 77 43 40	6.66
23599	17 23 22.7	+ 80 10 58	5.91

CLUSTERS OF GALAXIES

Cluster	Character	Population	Diameter in cm	Distance	Number on chart
1609.0 + 8212	medium compact	260	17.5	Near	1
1611.6 + 7740	compact	93	2.1	VD	3
1653.9 + 7856	compact	225	12.5	Near	2
1712.1 + 7740	medium compact	153	8.1	Near	9
1723.8 + 7722	medium compact	72	2.2	D	6
1725.8 + 7841	medium compact	95	4.0	D	7
1727.2 + 7643	medium compact	151	9.4	MD	5
1730.9 + 7304	medium compact	345	20.2	Near	4
1731.5 + 7948	medium compact	82	4.2	VD	8

Average number of galaxies per cluster = 164.0

GALAXIES

Position α 1950 h m	Position δ 1950 ° ′	NGC IC*	m_p	V_s km/sec	Remarks
15 36.0	+ 80 12		15.6		
15 56.0	+ 80 15		15.7		very compact
15 57.2	+ 79 18		15.5		
15 57.3	+ 79 07		14.7		
15 58.0	+ 79 08	6068	13.3		
15 59.0	+ 78 37		15.7		diffuse spiral
16 03.0	+ 80 00		15.3		
16 04.0	+ 80 22		15.7		compact
16 08.0	+ 79 45		15.2		
16 29.1	+ 75 59		15.6		
16 32.0	+ 80 28		15.5		
16 33.7	+ 79 03		15.3		
16 34.2	+ 76 51		14.9		
16 34.9	+ 78 18	6217	12.1	+ 1384	m_H = 12.6 Sc
16 35.6	+ 77 12		15.2		
16 38.7	+ 78 53		15.7		
16 39.4	+ 78 14		15.1		triple system
16 45.5	+ 78 29		15.4		
16 46.1	+ 75 47		15.0		
16 46.6	+ 77 56		15.5		multiple system, connected
16 48.0	+ 75 22		15.7		
16 56.0	+ 79 09		15.5		
17 04.6	+ 79 06		15.6		
17 06.3	+ 78 42	6331	15.4		triple system in halo
17 07.0	+ 75 29	6324	13.5		
17 07.0	+ 78 42		15.6		
17 07.2	+ 78 43		15.5		
17 08.2	+ 77 11		15.6		compact
17 16.0	+ 80 14		15.4		
17 20.6	+ 78 04		15.7		
17 22.0	+ 77 06		15.5		extremely compact
17 23.4	+ 75 54	4660*	14.3		
17 28.4	+ 77 45		15.4		
17 31.2	+ 75 45	6412	12.4	+ 1508	m_H = 12.8 S
17 32.2	+ 77 26		15.3		

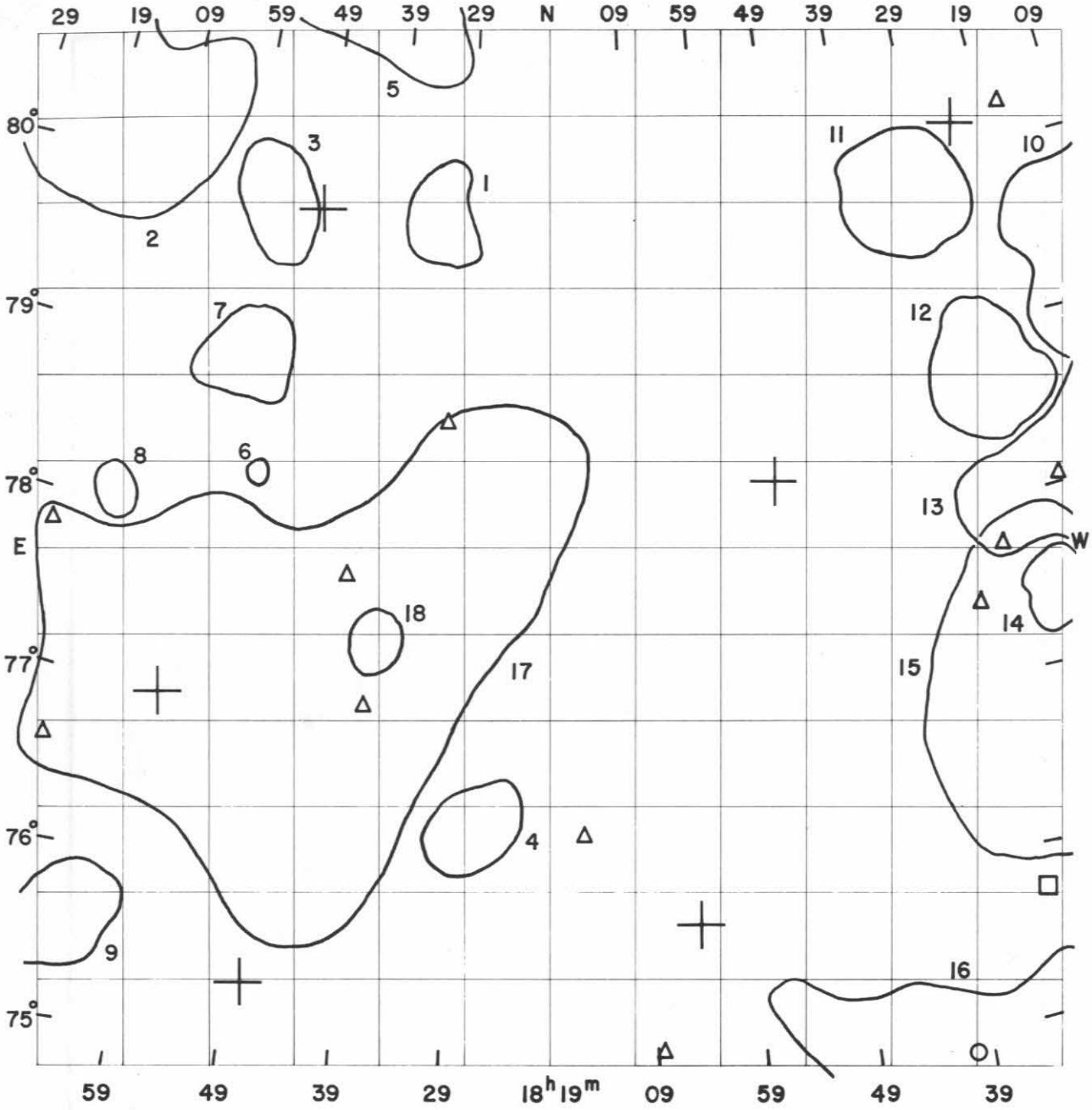
A small area near the SW-corner of this field and outlined approximately by

$$16^h04^m \leq \alpha \leq 16^h15^m, \quad 74^\circ30' \leq \delta \leq 74^\circ50'$$

is not included in any of the adjacent fields. However, it contains no objects fit for inclusion in this catalogue.

MAGNITUDES AND TYPES FROM OTHER SOURCES

NGC IC*	Bigay 1951		Pettit 1954		Humason, Mayall, Sandage 1956		Holmberg 1958	
6217	11.9	Sc	11.83	Sc	11.9	Sc	-	-
6412	-	-	12.36	Sc	12.4	Sc	12.19	Sc-



FIELD No. 356

18^h19^m $+78^o00'$

Survey Plate No. 776

GC STARS

Nos.	R.A.	Decl.	m_p
	h m s	o ' "	
23599	17 23 22.7	+ 80 10 58	5.91
24370	17 52 59.2	+ 78 19 00	6.38
24685	18 04 41.0	+ 75 47 06	6.82
25839	18 47 59.8	+ 75 22 34	5.37
25868	18 49 11.6	+ 79 53 05	6.33
26183	19 00 04.2	+ 76 58 51	6.49

CLUSTERS OF GALAXIES

Cluster	Character	Population	Diameter in cm	Distance	Number on chart
1653.9 + 7856	compact	225	12.5	Near	10
1712.1 + 7740	medium compact	153	8.1	Near	13
1723.8 + 7722	medium compact	72	2.2	D	14
1725.8 + 7841	medium compact	95	4.0	D	12
1727.2 + 7643	medium compact	151	9.4	MD	15
1730.9 + 7304	medium compact	345	20.2	Near	16
1731.5 + 7948	medium compact	82	4.2	VD	11
1826.9 + 7621	compact	75	2.9	D	4
1833.0 + 7952	open	81	2.7	D	1
1837.7 + 7724	medium compact	75	1.8	VD	18
1842.0 + 8104	open	128	4.1	D	5
1847.2 + 7711	open	325	14.6	Near	17
1852.6 + 7820	compact	51	0.7	ED	6
1855.5 + 7953	medium compact	125	3.2	VD	3
1855.8 + 7859	medium compact	74	3.1	ED	7
1905.2 + 7535	medium compact	89	3.5	D	9
1908.5 + 7805	medium compact	59	1.5	VD	8
1917.0 + 8013	open	94	6.8	D	2

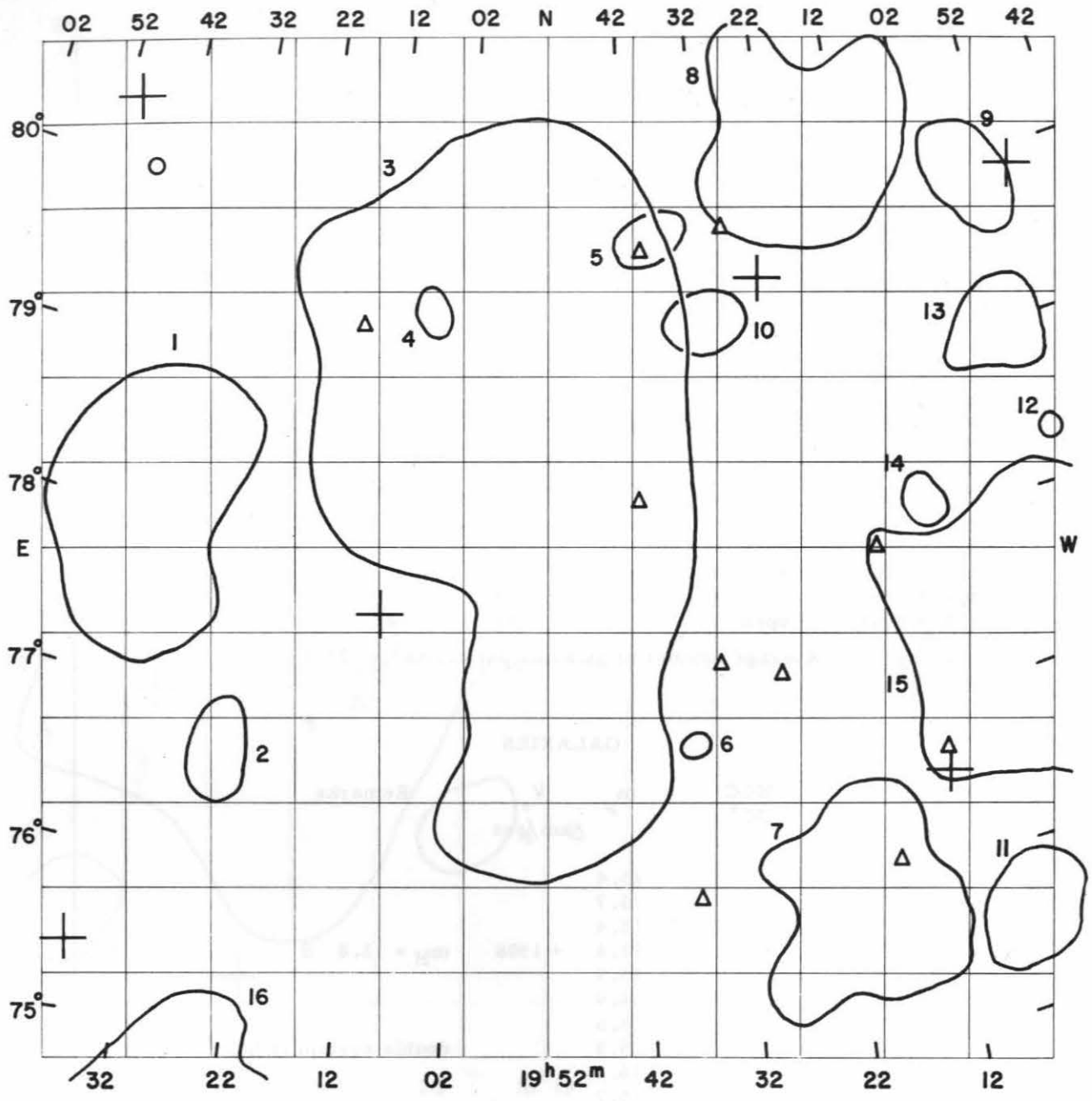
Average number of galaxies per cluster = 127.7

GALAXIES

Position α 1950 h m	Position δ 1950 o '	NGC IC*	m_p	V_s km/sec	Remarks
17 16.0	+ 80 14		15.4		
17 20.6	+ 78 04		15.7		
17 28.4	+ 77 45		15.4		
17 31.2	+ 75 45	6412	12.4	+ 1508	m_H = 12.8 S
17 32.2	+ 77 26		15.3		
17 40.3	+ 74 52		14.9		
18 08.4	+ 75 04		15.6		
18 15.4	+ 76 20		15.5		double system in halo
18 31.0	+ 78 44		15.2		
18 38.6	+ 77 03		15.7		
18 41.4	+ 77 48		15.7		double system, faint bridge
19 10.7	+ 76 37		15.6		
19 14.7	+ 77 50		15.4		extensive loop

MAGNITUDES AND TYPES FROM OTHER SOURCES

NGC IC*	Bigay 1951		Pettit 1954		Humason, Mayall, Sandage 1956		Holmberg 1958	
6412	-	-	12.36	Sc	12.4	Sc	12.19	Sc-



FIELD No. 357

19^h52^m + 78°00'

Survey Plate No. 832

GC STARS

Nos.	R.A.	Decl.	m_p
	h m s	° ' "	
25868	18 49 11.6	+ 79 53 05	6.33
26484	19 11 01.2	+ 76 28 42	5.06
26857	19 24 44.9	+ 79 30 16	6.00
28066	20 10 36.6	+ 77 33 42	4.40
28804	20 38 03.1	+ 75 24 58	Var.
29107	20 49 54.8	+ 80 21 57	5.58

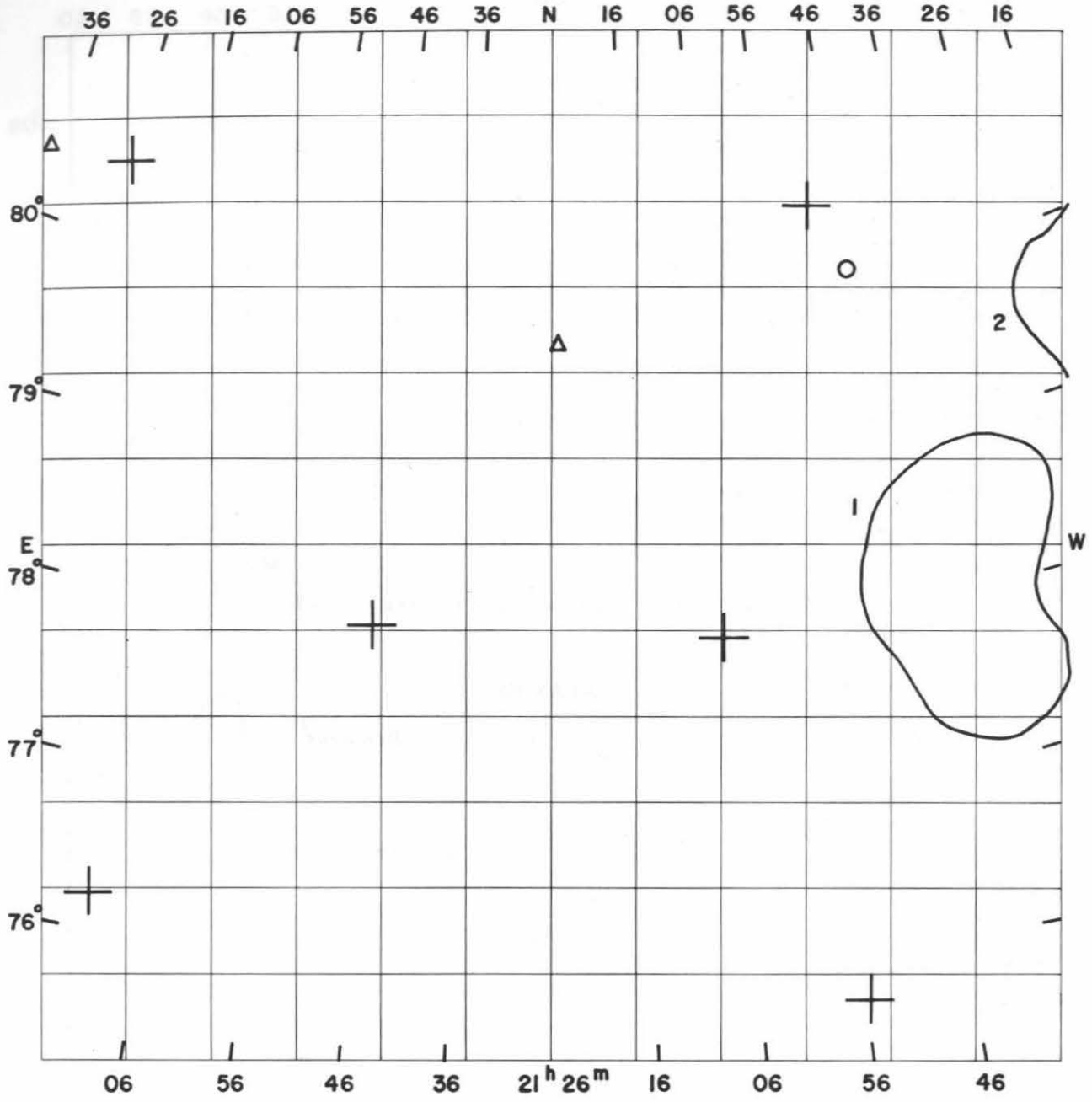
CLUSTERS OF GALAXIES

Cluster	Character	Population	Diameter in cm	Distance	Number on chart
1847.2 + 7711	open	325	14.6	Near	15
1852.6 + 7820	compact	51	0.7	ED	12
1855.5 + 7953	medium compact	125	3.2	VD	9
1855.8 + 7859	medium compact	74	3.1	ED	13
1905.2 + 7535	medium compact	89	3.5	D	11
1908.5 + 7805	medium compact	59	1.5	VD	14
1917.0 + 8013	open	94	6.8	D	8
1921.0 + 7546	open	97	6.6	MD	7
1932.0 + 7916	medium compact	59	2.3	VD	10
1936.8 + 7648	compact	35	0.9	ED	6
1939.0 + 7946	medium compact	89	2.0	VD	5
1954.8 + 7824	open	206	16.4	Near	3
2006.5 + 7920	compact	55	1.3	VD	4
2026.3 + 7639	medium compact	83	2.5	D	2
2026.5 + 7425	open	109	7.7	Near	16
2037.4 + 7800	open	135	7.7	MD	1

Average number of galaxies per cluster = 105.3

GALAXIES

Position α 1950 h m	Position δ 1950 o '	NGC IC*	m_p	V_s km/sec	Remarks
19 10.7	+ 76 37		15.6		
19 14.7	+ 77 50		15.4		extensive loop
19 17.1	+ 76 00		15.7		
19 26.8	+ 77 10		15.5		
19 28.8	+ 79 50		15.6		
19 33.2	+ 77 16		15.4		
19 36.9	+ 75 54		15.7		
19 39.7	+ 79 43		15.7		
19 41.4	+ 78 15		15.5		double system, connected
20 15.0	+ 79 15		15.3		
20 46.0	+ 79 58		14.2		



FIELD No. 358

21^h26^m $+78^\circ30'$

Survey Plate No. 1232

GC STARS

Nos.	R.A.	Decl.	m_p
	h m s	o ' "	
29107	20 49 54.8	+ 80 21 57	5.58
29254	20 55 21.3	+ 75 43 57	6.21
29563	21 06 32.0	+ 77 55 27	5.90
30535	21 46 14.8	+ 78 00 04	7.18
31113	22 11 59.7	+ 76 12 48	7.12
31396	22 26 06.5	+ 80 26 46	6.80

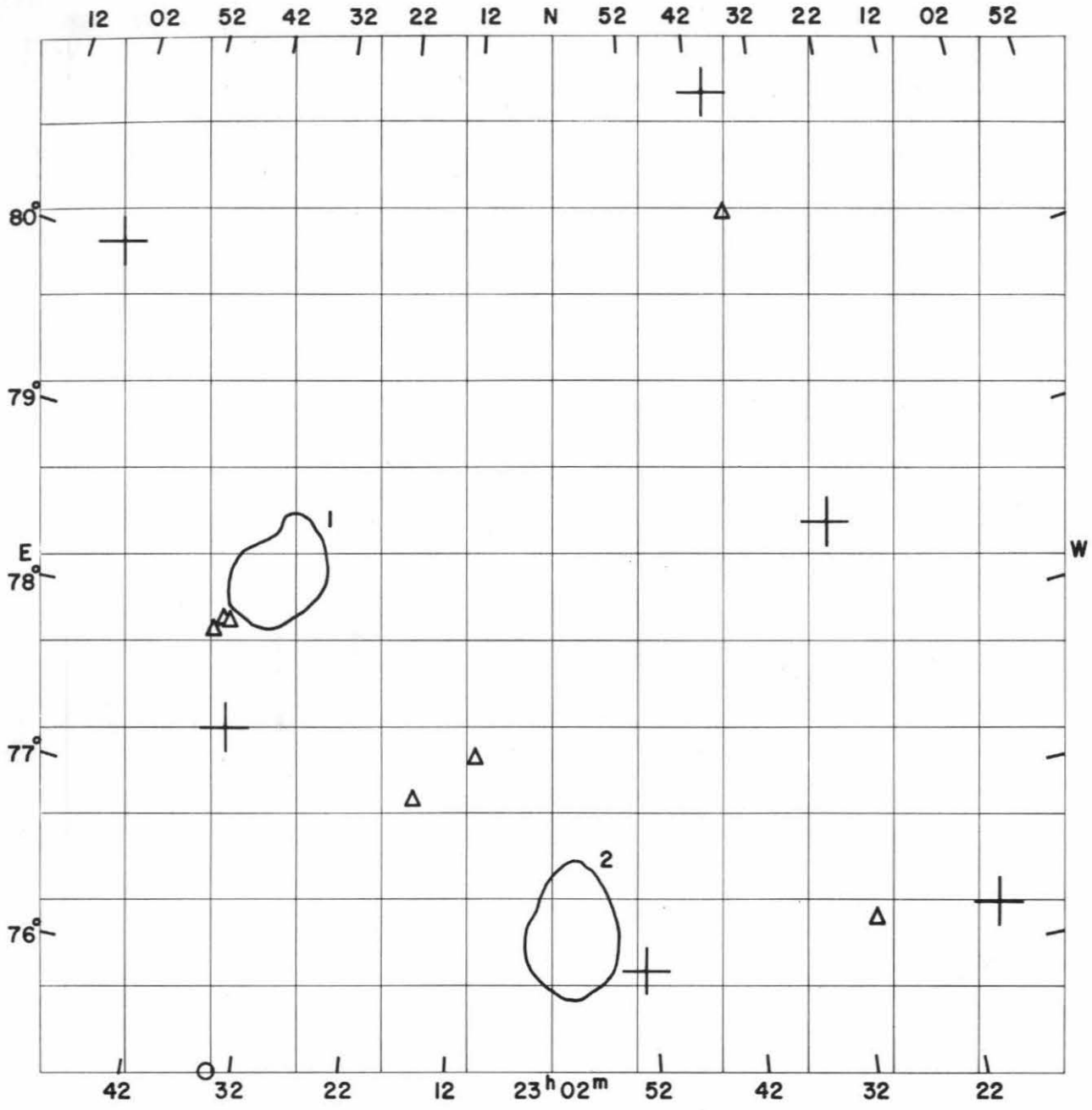
CLUSTERS OF GALAXIES

Cluster	Character	Population	Diameter in cm	Distance	Number on chart
1954.8 + 7824	open	206	16.4	Near	2
2037.4 + 7800	open	135	7.7	MD	1

Average number of galaxies per cluster = 170.5

GALAXIES

Position α 1950 h m	Position δ 1950 o '	NGC IC*	m_p	V_s km/sec	Remarks
20 46.0	+ 79 58		14.2		
21 25.0	+ 79 41		15.5		
22 38.0	+ 80 25		15.6		



FIELD No. 359

23^h02^m $+78^\circ30'$

Survey Plate No. 1210

GC STARS

Nos.	R.A.	Decl.	m_p
	h m s	° ′ ″	
31227	22 17 45.0	+ 76 14 13	6.56
31474	22 29 27.6	+ 78 34 04	5.50
31671	22 39 20.3	+ 81 07 50	6.90
31968	22 52 58.0	+ 76 04 18	7.37
32875	23 37 16.6	+ 77 21 12	3.42
4	0 00 09.6	+ 80 00 14	7.69

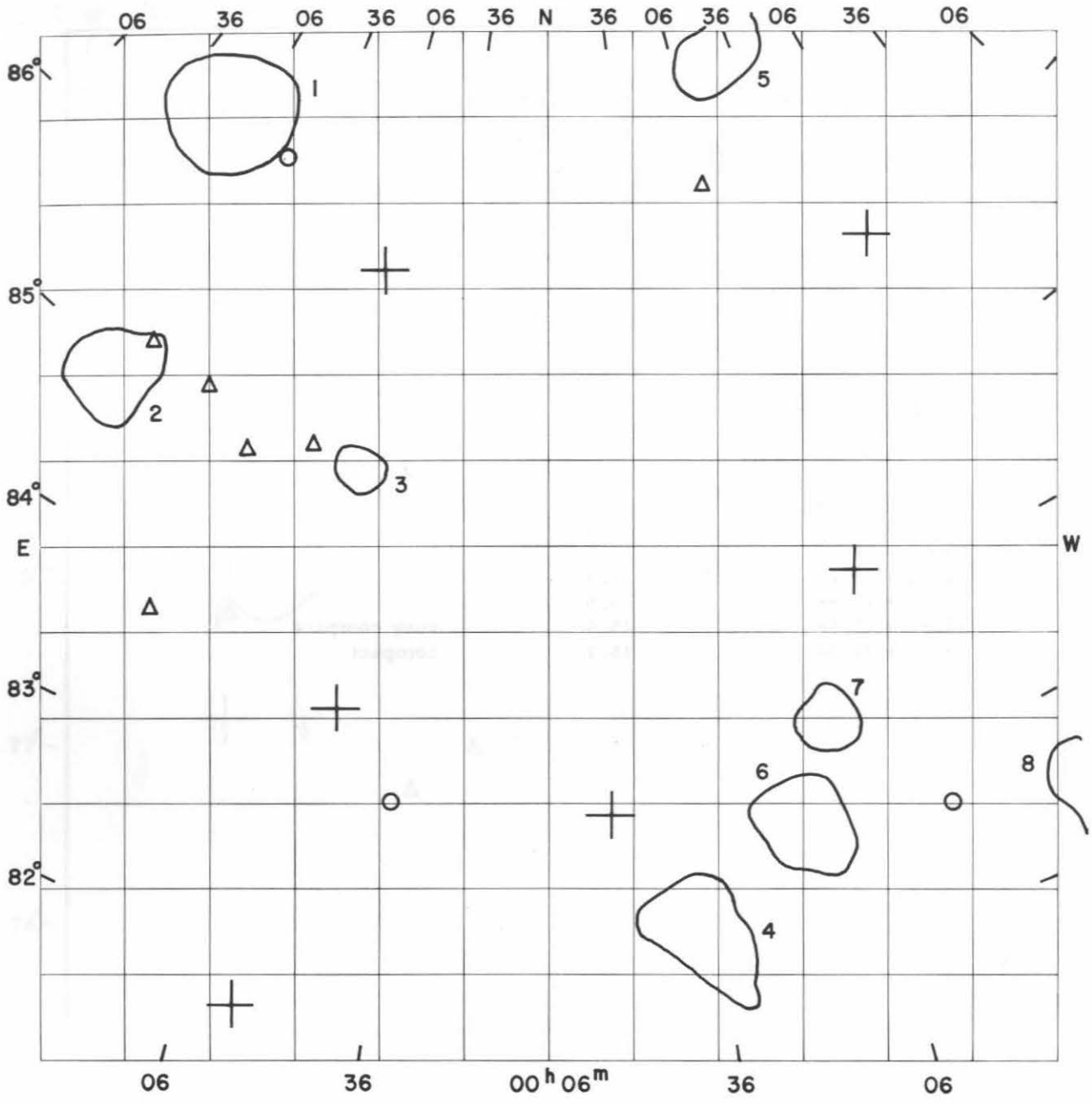
CLUSTERS OF GALAXIES

Cluster	Character	Population	Diameter in cm	Distance	Number on chart
2300.0 + 7617	open	69	3.5	MD	2
2333.2 + 7815	medium compact	107	3.1	MD	1

Average number of galaxies per cluster = 88.0

GALAXIES

Position α 1950 h m	Position δ 1950 o '	NGC IC*	m_p	V_s km/sec	Remarks
22 30.0	+ 76 15		15.7		extremely diffuse spiral
22 38.0	+ 80 25		15.6		
23 10.4	+ 77 19		15.4		
23 16.8	+ 77 03		15.6		
23 34.1	+ 75 23	1502*	14.7		
23 38.3	+ 77 58		15.5		
23 39.0	+ 77 58		15.6		very compact
23 39.9	+ 77 54		15.7		compact



FIELD No. 360

0^h06^m $+84^\circ30'$

Survey Plate No. 568

GC STARS

Nos.	R.A.	Decl.	m_p
	h m s	o ' "	
31223	22 17 33.7	+ 85 51 27	5.38
31999	22 54 53.4	+ 84 04 44	4.96
33205	23 54 04.0	+ 82 54 46	Var.
1045	0 50 02.9	+ 83 26 12	5.55
1202	0 57 45.0	+ 81 36 25	Var.
1288	1 01 30.8	+ 85 59 24	4.52

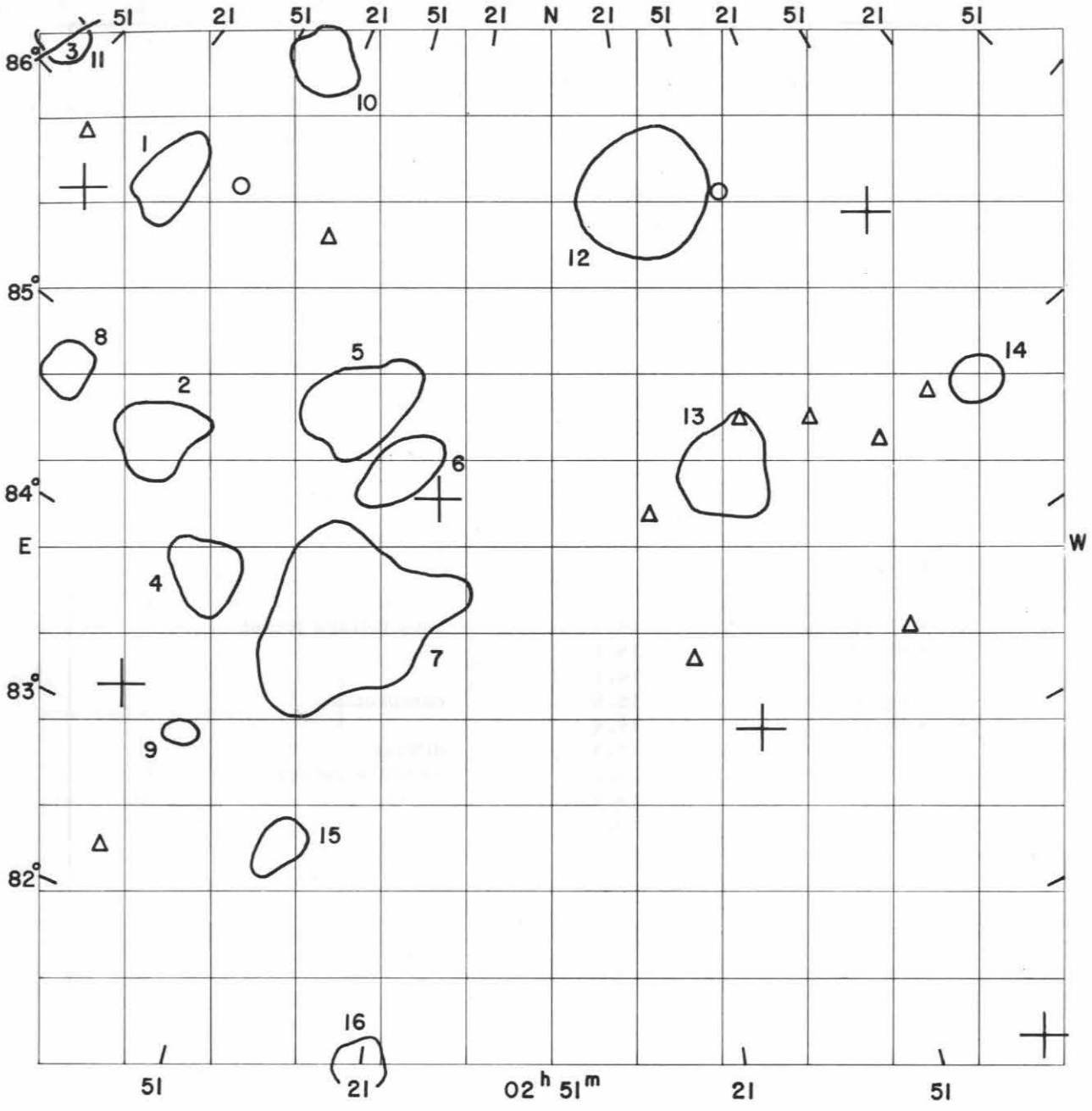
CLUSTERS OF GALAXIES

Cluster	Character	Population	Diameter in cm	Distance	Number on chart
2227.0 + 8225	medium compact	68	2.5	VD	8
2243.0 + 8713	medium compact	94	2.7	MD	5
2309.0 + 8317	compact	59	2.0	ED	7
2318.0 + 8243	medium compact	70	3.1	D	6
2339.0 + 8209	medium compact	96	3.5	MD	4
0056.0 + 8450	medium compact	70	1.5	ED	3
0205.0 + 8450	medium compact	112	3.0	D	2
0215.0 + 8630	medium compact	100	4.0	MD	1

Average number of galaxies per cluster = 83.6

GALAXIES

Position α 1950 δ	NGC IC*	m_p	V_s km/sec	Remarks
h m o '				
22 50 +82 38		14.9		very diffuse spiral
23 06 +86 29		15.6		
0 36 +82 57		14.8		
1 09 +84 54		15.6		compact
1 25 +84 46		15.4		
1 34 +83 43		15.5		diffuse
1 40 +85 01		15.1		eruptive galaxy
1 47 +86 27		14.5		
1 59 +85 08		15.7		



FIELD No. 361

2^h51^m $+84^o30'$

Survey Plate No. 1277

GC STARS

Nos.	R.A.	Decl.	m_p
	h m s	o ' "	
1288	1 01 30.8	+ 85 59 24	4.52
1968	1 34 57.6	+ 81 10 35	7.10
2622	2 08 51.9	+ 83 19 45	6.86
4030	3 20 06.1	+ 84 44 24	5.78
5279	4 18 49.4	+ 83 13 35	5.70
6778	5 26 41.9	+ 85 38 17	6.55

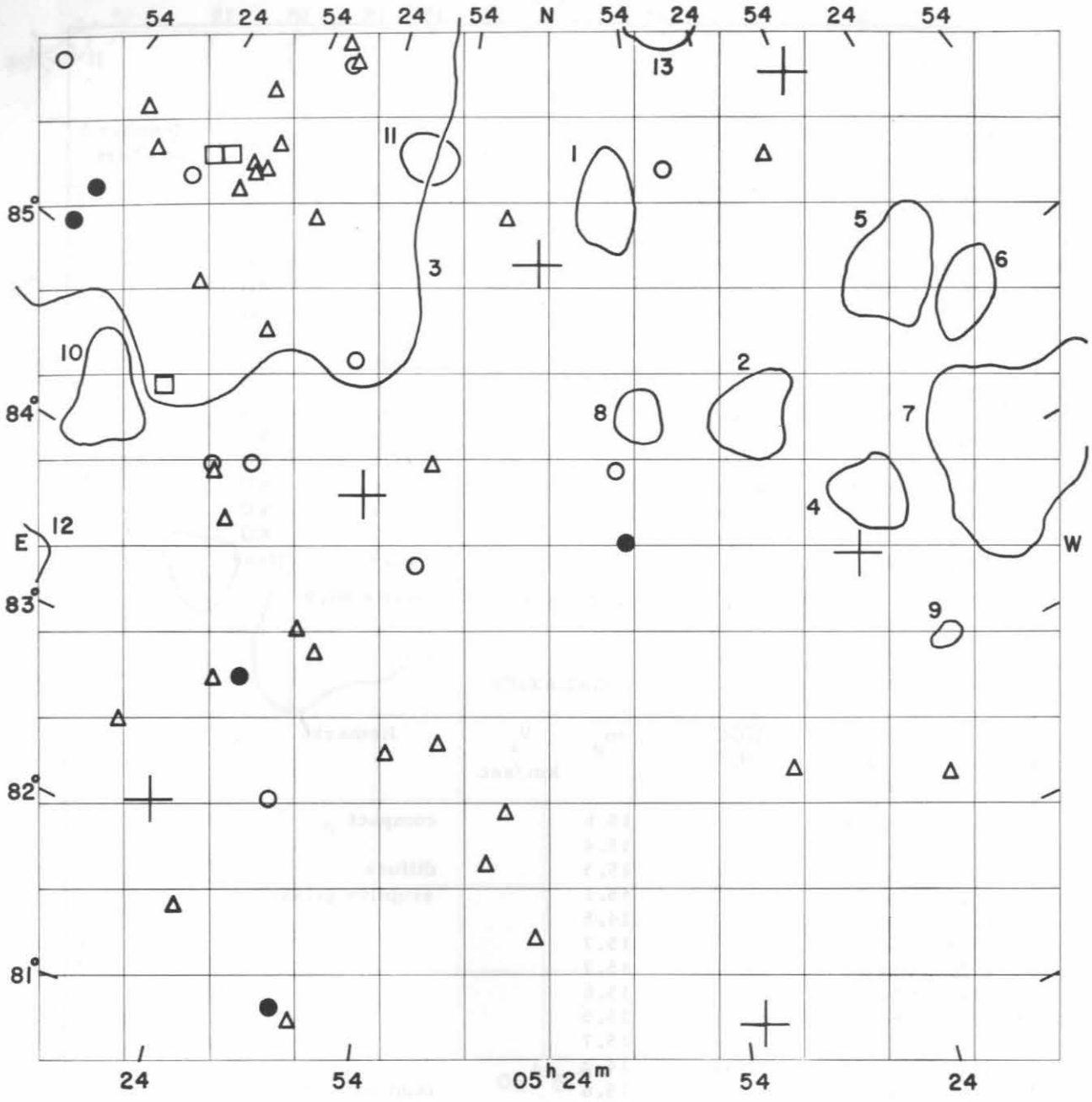
CLUSTERS OF GALAXIES

Cluster	Character	Population	Diameter in cm	Distance	Number on chart
0056.0 + 8450	medium compact	70	1.5	ED	14
0205.0 + 8450	medium compact	112	3.0	D	13
0215.0 + 8630	medium compact	100	4.0	MD	12
0321.0 + 8124	compact	61	1.7	ED	16
0331.0 + 8451	compact	56	2.2	VD	6
0338.0 + 8356	medium compact	91	5.4	D	7
0341.0 + 8235	medium compact	49	1.8	ED	15
0346.0 + 8509	medium compact	83	3.1	D	5
0404.0 + 8304	medium compact	35	0.9	ED	9
0410.0 + 8359	open	71	2.3	ED	4
0433.0 + 8437	open	69	2.5	VD	2
0435.0 + 8701	open	67	2.1	VD	10
0501.0 + 8443	compact	54	1.6	ED	8
0506.0 + 8558	medium compact	97	2.4	VD	1
0607.0 + 8613	compact	63	1.7	ED	11
0735.0 + 8545	open	216	16.9	Near	3

Average number of galaxies per cluster = 80.9

GALAXIES

Position α 1950 δ	NGC IC*	m_p	V_s km/sec	Remarks
h m o '				
1 09 +84 54		15.6		compact
1 25 +84 46		15.4		
1 34 +83 43		15.5		diffuse
1 40 +85 01		15.1		eruptive galaxy
1 47 +86 27		14.5		
1 59 +85 08		15.7		
2 20 +83 48		15.7		
2 27 +84 40		15.6		
4 09 +86 05		15.5		
4 12 +82 18		15.7		
4 44 +86 09	1544	14.2		
5 37 +85 54		15.6		faint outer halo



FIELD No. 362

5^h24^m $+84^\circ00'$

Survey Plate No. 1328

GC STARS

Nos.	R.A.	Decl.	m_p
	h m s	o ' "	
4693	3 51 16.5	+ 86 29 19	5.84
5208	4 16 24.2	+ 83 41 33	5.39
5962	4 50 54.5	+ 81 07 00	5.32
6778	5 26 41.9	+ 85 38 17	6.55
7842	6 07 21.3	+ 84 11 46	8.9
8605	6 33 59.2	+ 82 09 49	6.39

CLUSTERS OF GALAXIES

Cluster	Character	Population	Diameter in cm	Distance	Number on chart
0331.0 + 8451	compact	56	2.2	VD	6
0338.0 + 8356	medium compact	91	5.4	D	7
0346.0 + 8509	medium compact	83	3.1	D	5
0404.0 + 8304	medium compact	35	0.9	ED	9
0410.0 + 8359	open	71	2.3	ED	4
0433.0 + 8437	open	69	2.5	VD	2
0435.0 + 8701	open	67	2.1	VD	13
0501.0 + 8443	compact	54	1.6	ED	8
0506.0 + 8558	medium compact	97	2.4	VD	1
0607.0 + 8613	compact	63	1.7	ED	11
0712.0 + 8415	compact	75	2.8	VD	10
0718.0 + 8304	medium compact	109	3.2	VD	12
0735.0 + 8545	open	216	16.9	Near	3

Average number of galaxies per cluster = 83.5

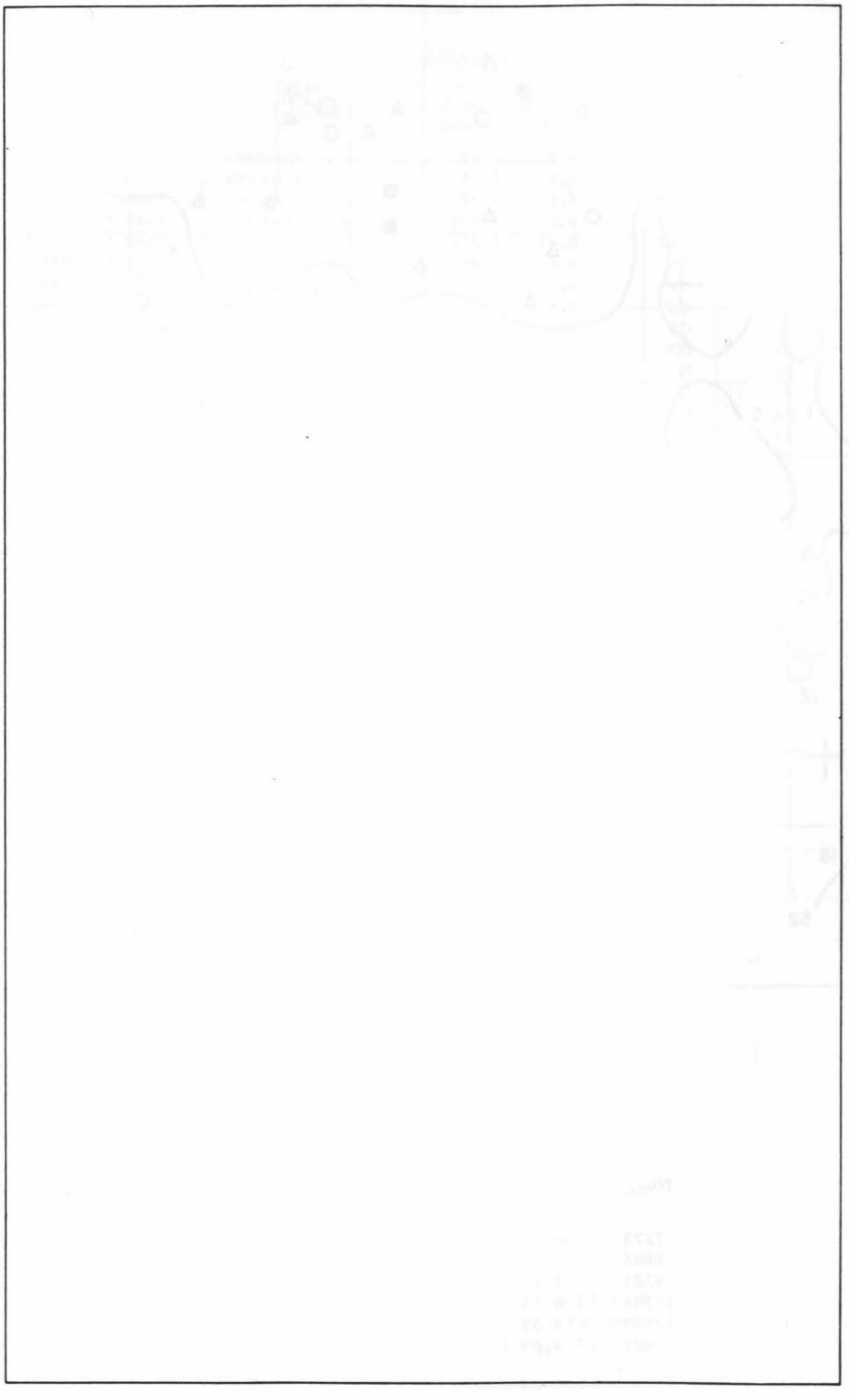
GALAXIES

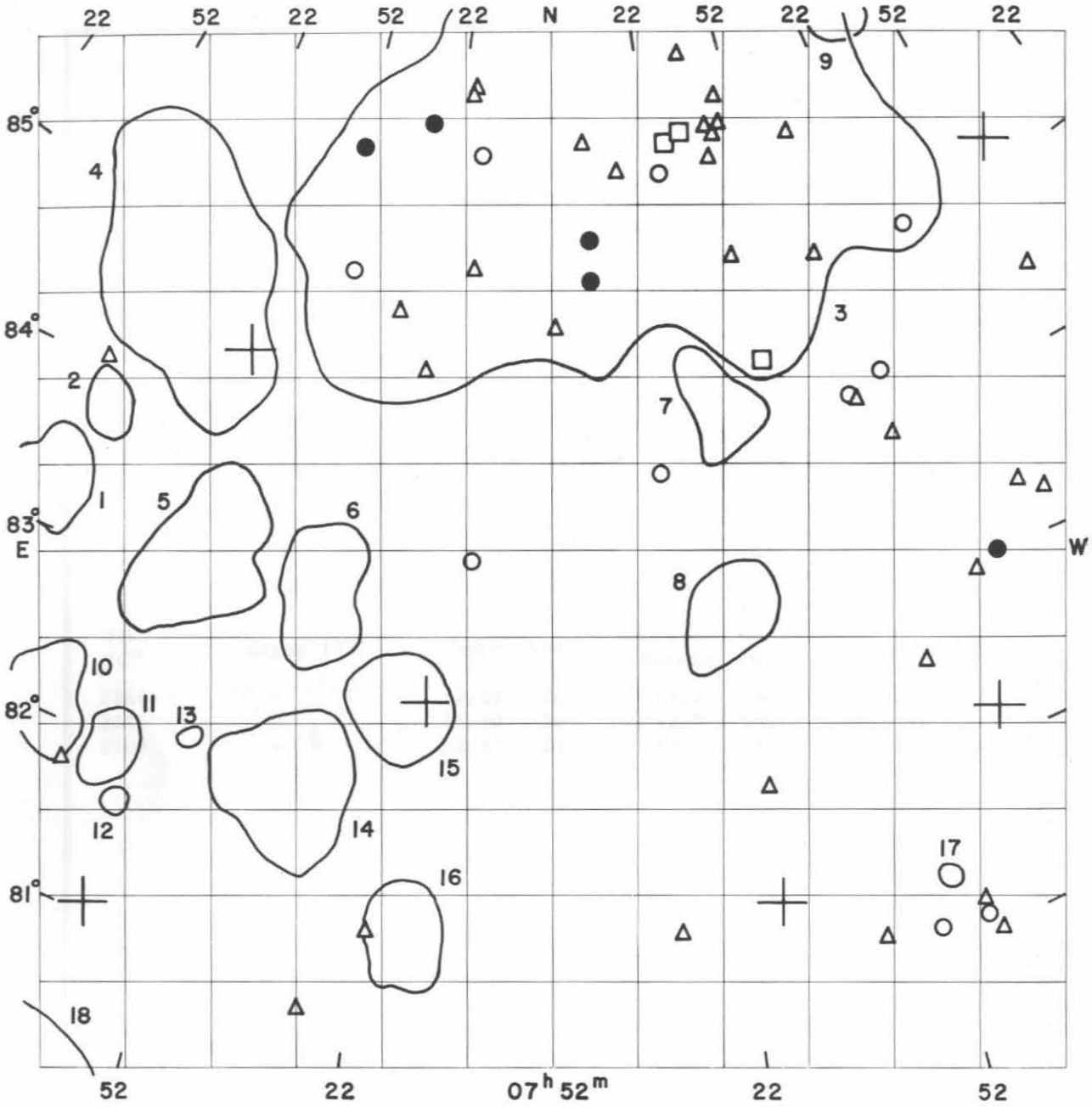
Position α 1950 δ h m o '	NGC IC*	m_p	V_s km/sec	Remarks
4 09 + 86 05		15.5		
4 12 + 82 18		15.7		
4 39 + 82 34		15.4		
4 44 + 86 09	1544	14.2		
5 07 + 84 00		13.1		
5 08 + 84 26		14.9		
5 26 + 81 42		15.7		
5 31 + 82 26		15.4		
5 35 + 82 08		15.7		
5 37 + 85 54		15.6		faint outer halo
5 45 + 82 48		15.6		
5 52 + 84 25		15.5		double system, contact
5 53 + 83 50		14.6		
5 55 + 82 43		15.5		
6 04 + 81 05		15.7		
6 07 + 81 10		13.8		
6 11 + 83 14		15.6		
6 14 + 82 21		14.6		
6 16 + 83 20		15.3		
6 16 + 84 57		14.8		
6 25 + 81 37		15.7		
6 25 + 83 00	442*	13.7		double nucleus in halo
6 29 + 82 57		15.6		
6 34 + 84 13		14.7		
6 36 + 83 51		15.7		
6 38 + 85 42		15.5		
6 41 + 84 06		15.5		
6 41 + 84 58		15.7		compact nucleus in spiral
6 42 + 84 08		14.5		
6 42 + 86 40		15.6		
6 43 + 86 38		14.8		
6 44 + 82 33		15.7		
6 48 + 86 45		15.3		
6 57 + 86 01		15.7		

Position α 1950 δ		NGC IC*	m_p	V_s km/sec	Remarks
h m	o '				
6 58	+ 85 51		15.4		
7 01	+ 84 28	2268	12.1	+ 2337	m_H = 12.2
7 01	+ 85 48		15.2		compact
7 02	+ 85 51		15.6		
7 03	+ 85 06		15.3		compact
7 03	+ 85 41		15.4		
7 07	+ 86 19		15.5		
7 10	+ 85 51	2276	12.3	+ 2391	m_H = 12.4 S
7 16	+ 85 49	2300	12.2	+ 2017	m_H = 12.2 E
7 19	+ 85 39	455*	14.3		
7 32	+ 85 41		15.5		
7 41	+ 85 04		14.0		compact nucleus
7 41	+ 85 18	469*	13.6		
7 41	+ 85 51		15.3		compact
8 13	+ 85 47		14.5		

MAGNITUDES AND TYPES FROM OTHER SOURCES

NGC IC*	Bigay 1951		Pettit 1954		Humason, Mayall, Sandage 1956		Holmberg 1958	
2268	-	-	12.22	Sc	12.2	Sc	12.18	Sc-
2276	-	-	11.90	Sc	12.0	Sc	11.91	Sc+
2300	-	-	12.37	E1	12.2	E1	12.25	E





FIELD No. 363

7^h52^m $+83^\circ30'$

Survey Plate No. 692

GC STARS

Nos.	R.A.	Decl.	m_p
	h m s	o ' "	
7273	5 45 34.5	+ 85 10 27	6.41
8605	6 33 59.2	+ 82 09 49	6.39
9721	7 15 58.3	+ 81 21 14	6.20
11296	8 15 03.3	+ 82 35 26	6.17
12573	9 03 53.4	+ 81 01 57	6.53
12603	9 05 16.3	+ 84 23 11	6.26

CLUSTERS OF GALAXIES

Cluster	Character	Population	Diameter in cm	Distance	Number on chart
0607.0 + 8613	compact	63	1.7	ED	9
0650.0 + 8119	compact	35	0.7	ED	17
0712.0 + 8415	compact	75	2.8	VD	7
0718.0 + 8304	medium compact	109	3.2	VD	8
0735.0 + 8545	open	216	16.9	Near	3
0815.0 + 8114	medium compact	57	3.0	VD	16
0819.0 + 8233	medium compact	91	3.4	VD	15
0837.0 + 8200	open	93	4.7	VD	14
0837.0 + 8308	medium compact	105	3.7	VD	6
0854.0 + 8209	compact	45	0.8	ED	13
0859.2 + 7945	medium compact	234	5.5	D	18
0902.0 + 8307	medium compact	112	4.5	D	5
0904.0 + 8140	compact	55	0.9	ED	12
0907.0 + 8158	compact	94	2.1	ED	11
0920.0 + 8207	medium compact	78	3.0	VD	10
0925.0 + 8441	medium compact	173	7.2	D	4
0930.0 + 8348	medium compact	98	1.7	ED	2
0934.0 + 8317	medium compact	116	3.1	VD	1

Average number of galaxies per cluster = 102.7

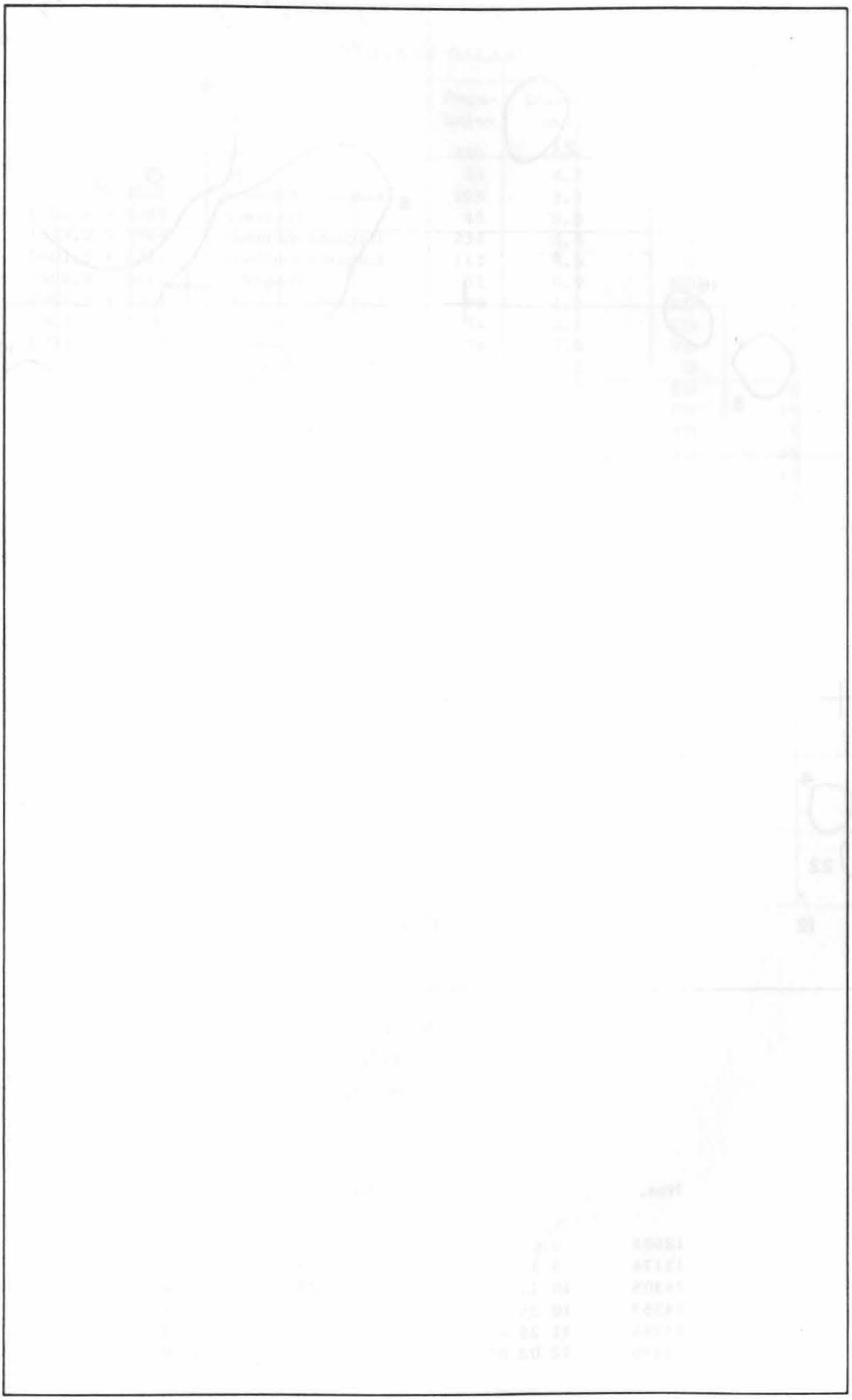
GALAXIES

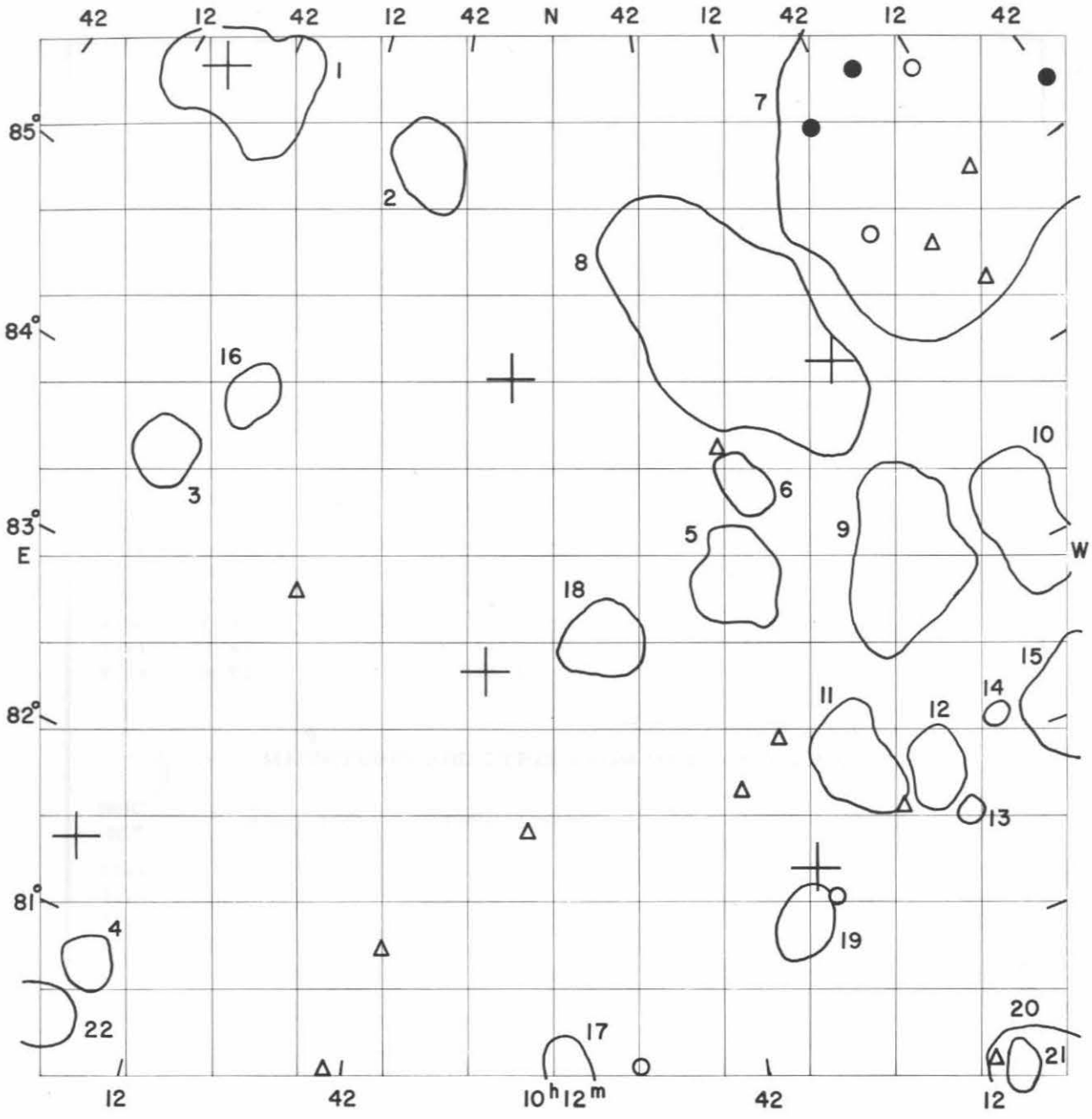
Position α 1950 δ h m o '	NGC IC*	m_p	V_s km/sec	Remarks
5 52 + 84 25		15.5		double system, contact
6 11 + 83 14		15.6		
6 16 + 83 20		15.3		
6 16 + 84 57		14.8		
6 25 + 83 00	442*	13.7		double nucleus in halo
6 29 + 82 57		15.6		
6 34 + 84 13		14.7		
6 36 + 83 51		15.7		
6 38 + 85 42		15.5		
6 41 + 84 06		15.5		
6 41 + 84 58		15.7		compact nucleus in spiral
6 42 + 84 08		14.5		
6 44 + 80 56		15.6		diffuse
6 44 + 82 33		15.7		
6 46 + 81 02		14.4		
6 46 + 81 07		15.7		
6 53 + 81 01		14.2		
6 57 + 86 01		15.7		
6 58 + 85 51		15.4		
7 01 + 84 28	2268	12.1	+ 2337	m_H = 12.2
7 01 + 85 48		15.2		compact
7 02 + 81 04		15.2		diffuse spiral
7 02 + 85 51		15.6		
7 03 + 85 06		15.3		compact
7 03 + 85 41		15.4		
7 07 + 86 19		15.5		
7 10 + 85 51	2276	12.3	+ 2391	m_H = 12.4 S
7 15 + 82 02		15.6		very compact
7 16 + 85 49	2300	12.2	+ 2017	m_H = 12.2 E
7 19 + 85 39	455*	14.3		

Position α 1950 δ h m o '	NGC IC*	m_p	V_s km/sec	Remarks
7 28 +83 54		14.9		long, extremely faint jets
7 32 +81 15		15.1		
7 32 +85 41		15.5		
7 41 +85 04		14.0		compact nucleus
7 41 +85 18	469*	13.6		
7 41 +85 51		15.3		compact
7 51 +84 46		15.4		
8 08 +83 25		14.2		
8 13 +85 06		15.5		
8 13 +85 47		14.5		
8 17 +86 09		15.2		diffuse
8 18 +86 07		15.7		extremely diffuse
8 21 +81 14		15.4		compact
8 23 +84 29		15.3		
8 29 +80 44		15.3		
8 30 +85 55	499*	13.5		
8 31 +84 49		15.7		
8 45 +85 00		14.9		
8 50 +85 42	512*	13.2		
9 14 +81 47		15.6		
9 35 +84 02		15.4		

MAGNITUDES AND TYPES FROM OTHER SOURCES

NGC IC*	Bigay 1951		Pettit 1954		Humason, Mayall, Sandage 1956		Holmberg 1958	
2268	-	-	12.22	Sc	12.2	Sc	12.18	Sc-
2276	-	-	11.90	Sc	12.0	Sc	11.91	Sc+
2300	-	-	12.37	E1	12.2	E1	12.25	E





FIELD No. 364

10^h12^m $+83^\circ30'$

Survey Plate No. 727

GC STARS

Nos.	R.A.	Decl.	m_p
	h m s	o ' "	
12603	9 05 16.3	+ 84 23 11	6.26
13174	9 30 07.4	+ 81 33 00	4.58
14305	10 22 41.9	+ 84 30 29	5.64
14367	10 25 10.0	+ 82 48 52	5.34
15795	11 28 23.5	+ 81 24 10	6.13
16496	12 02 09.8	+ 85 51 51	6.38

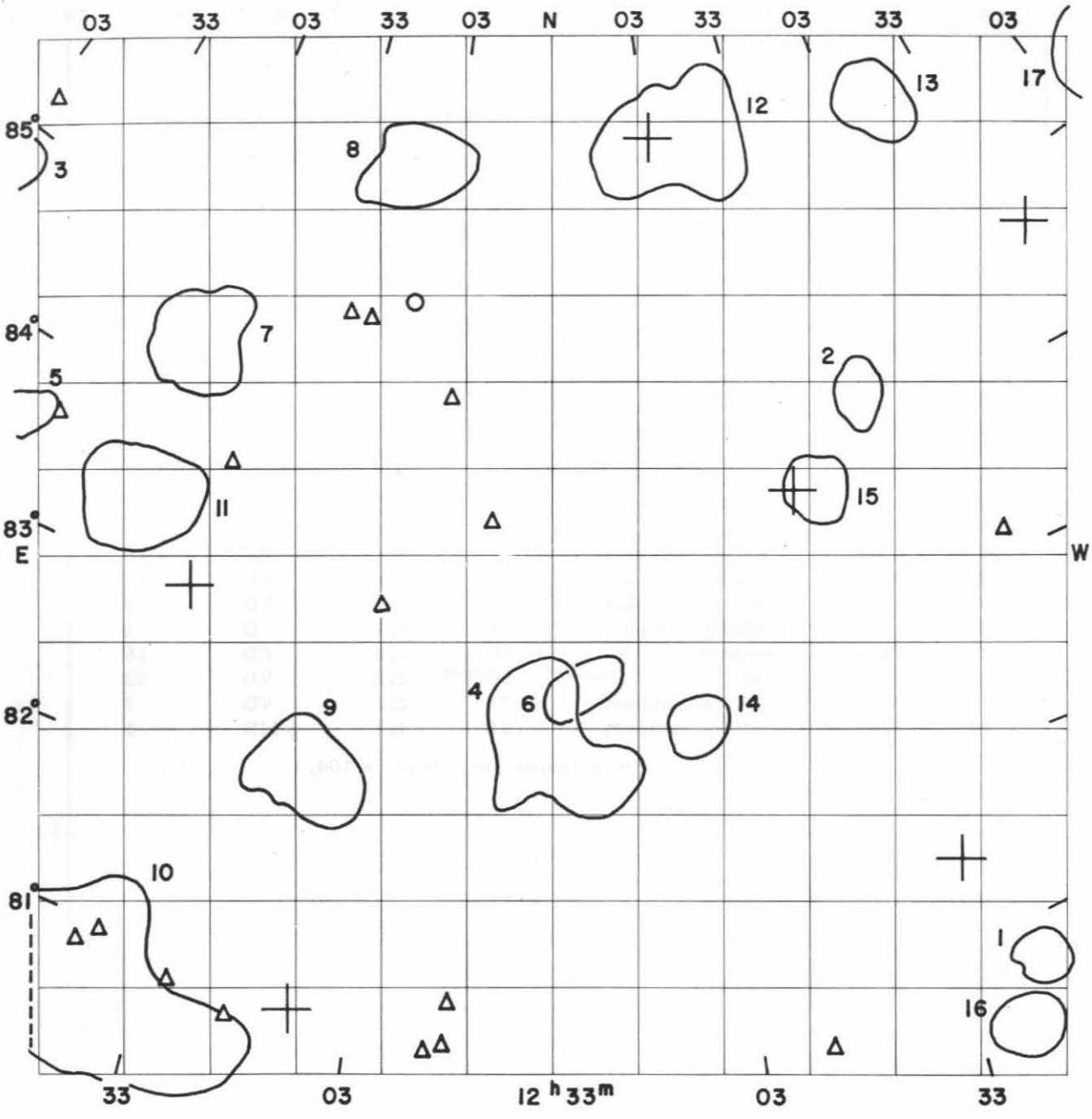
CLUSTERS OF GALAXIES

Cluster	Character	Population	Diameter in cm	Distance	Number on chart
0735.0 + 8545	open	216	16.9	Near	7
0837.0 + 8200	open	93	4.7	VD	15
0837.0 + 8308	medium compact	105	3.7	VD	10
0854.0 + 8209	compact	45	0.8	ED	14
0859.2 + 7945	medium compact	234	5.5	D	20
0902.0 + 8307	medium compact	112	4.5	D	9
0904.0 + 8140	compact	55	0.9	ED	13
0907.0 + 8009	medium compact	98	1.3	ED	21
0907.0 + 8158	compact	94	2.1	ED	12
0920.0 + 8207	medium compact	78	3.0	VD	11
0925.0 + 8441	medium compact	173	7.2	D	8
0930.0 + 8348	medium compact	98	1.7	ED	6
0934.0 + 8115	medium compact	91	2.0	ED	19
0934.0 + 8317	medium compact	116	3.1	VD	5
1003.0 + 8259	medium compact	108	2.4	VD	18
1010.0 + 8030	compact	113	1.8	VD	17
1050.0 + 8542	medium compact	81	2.5	VD	2
1121.0 + 8044	medium compact	63	1.7	D	4
1122.0 + 8409	compact	59	1.8	ED	16
1126.0 + 8022	open	60	2.2	VD	22
1136.0 + 8341	medium compact	77	2.1	VD	3
1153.0 + 8550	medium compact	121	4.3	MD	1

Average number of galaxies per cluster = 104.1

GALAXIES

Position α 1950 h m	Position δ o '	NGC IC*	m_p	V_s km/sec	Remarks
7 41	+85 18	469*	13.6		
8 13	+85 06		15.5		
8 13	+85 47		14.5		
8 23	+84 29		15.3		
8 30	+85 55	499*	13.5		
8 31	+84 49		15.7		
8 45	+85 00		14.9		
8 50	+85 42	512*	13.2		
9 10	+80 15		15.3		diffuse
9 14	+81 47		15.6		
9 28	+81 22		14.3		
9 33	+82 20		15.7		diffuse
9 35	+84 02		15.4		
9 40	+82 04		15.1		
10 00	+80 32	3057	14.2		
10 17	+81 55		15.5		
10 39	+81 10		15.2		
10 45	+80 26		15.6		compact
11 03	+83 08		15.4		compact



FIELD No. 365

12^h33^m $+83^o30'$

Survey Plate No. 1340

GC STARS

Nos.	R.A.	Decl.	m_p
	h m s	o ' "	
14437	10 28 14.9	+ 84 39 24	7.44
15795	11 28 23.5	+ 81 24 10	6.13
16100	11 41 27.3	+ 83 42 29	8.7
16496	12 02 09.8	+ 85 51 51	6.38
17932	13 11 56.9	+ 80 44 09	6.32
18611	13 43 40.8	+ 83 00 13	6.16

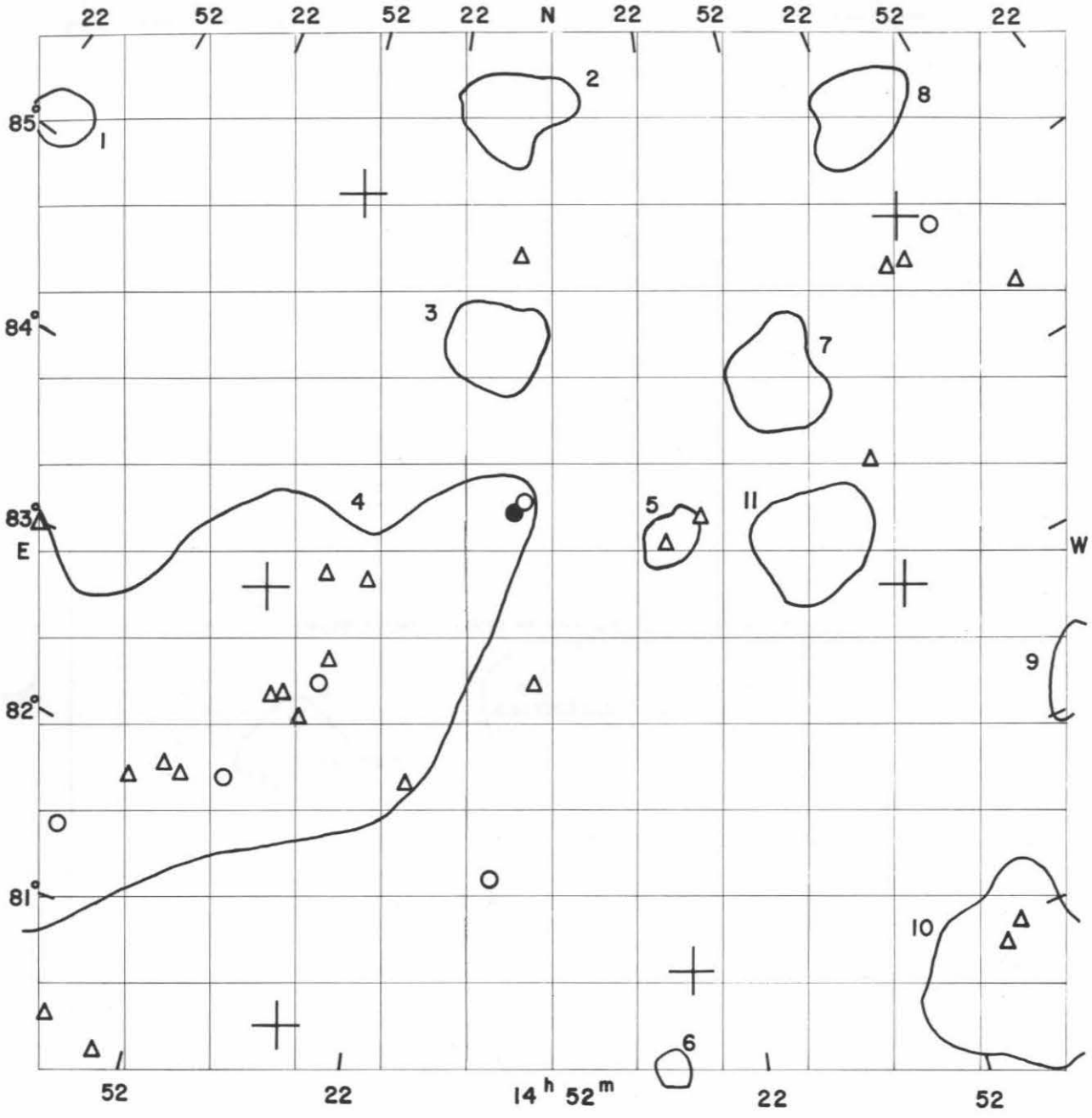
CLUSTERS OF GALAXIES

Cluster	Character	Population	Diameter in cm	Distance	Number on chart
0925.0 + 8441	medium compact	173	7.2	D	17
1050.0 + 8542	medium compact	81	2.5	VD	13
1121.0 + 8044	medium compact	63	1.7	D	1
1122.0 + 8409	compact	59	1.8	ED	2
1126.0 + 8022	open	60	2.2	VD	16
1136.0 + 8341	medium compact	77	2.1	VD	15
1153.0 + 8550	medium compact	121	4.3	MD	12
1207.0 + 8229	medium compact	70	1.9	D	14
1228.0 + 8245	compact	77	2.1	VD	6
1232.0 + 8222	open	74	4.5	MD	4
1315.0 + 8206	open	110	3.3	D	9
1315.0 + 8540	medium compact	69	3.0	D	8
1339.0 + 8035	open	121	6.8	MD	10
1358.0 + 8421	medium compact	80	3.2	MD	7
1359.0 + 8323	medium compact	118	3.7	D	11
1428.0 + 8334	medium compact	70	1.7	VD	5
1507.0 + 8440	open	84	3.1	VD	3

Average number of galaxies per cluster = 88.6

GALAXIES

Position α 1950 δ h m o '	NGC IC*	m_p	V_s km/sec	Remarks
11 03 + 83 08		15.4		compact
11 53 + 80 30		15.2		triple system, bridge + plume
12 45 + 83 42		15.5		
12 49 + 80 39		15.7		
12 49 + 80 53		15.6		
12 52 + 80 36		15.6		compact
12 57 + 84 23		15.4		
13 07 + 83 08		15.7		very compact
13 09 + 84 53		14.5		compact, plume
13 19 + 84 46		15.7		double system, connected
13 21 + 80 38		15.3		
13 25 + 84 47		15.6		double system, long bridge
13 30 + 80 45		15.5		
13 41 + 80 57		15.7		
13 43 + 83 45		15.5		
13 44 + 80 51		15.4		double system
14 21 + 83 39		15.6		
15 00 + 85 13		15.7		



FIELD No. 366

14^h52^m $+83^\circ30'$

Survey Plate No. 1363

GC STARS

Nos.	R.A.	Decl.	m_p
	h m s	° ' "	
18022	13 16 45.5	+ 85 00 54	7.35
18611	13 43 40.8	+ 83 00 13	6.16
19630	14 31 04.8	+ 81 01 56	7.10
20929	15 32 00.4	+ 80 36 57	6.47
21282	15 47 50.0	+ 85 26 31	7.05
21295	15 48 28.4	+ 83 06 03	7.32

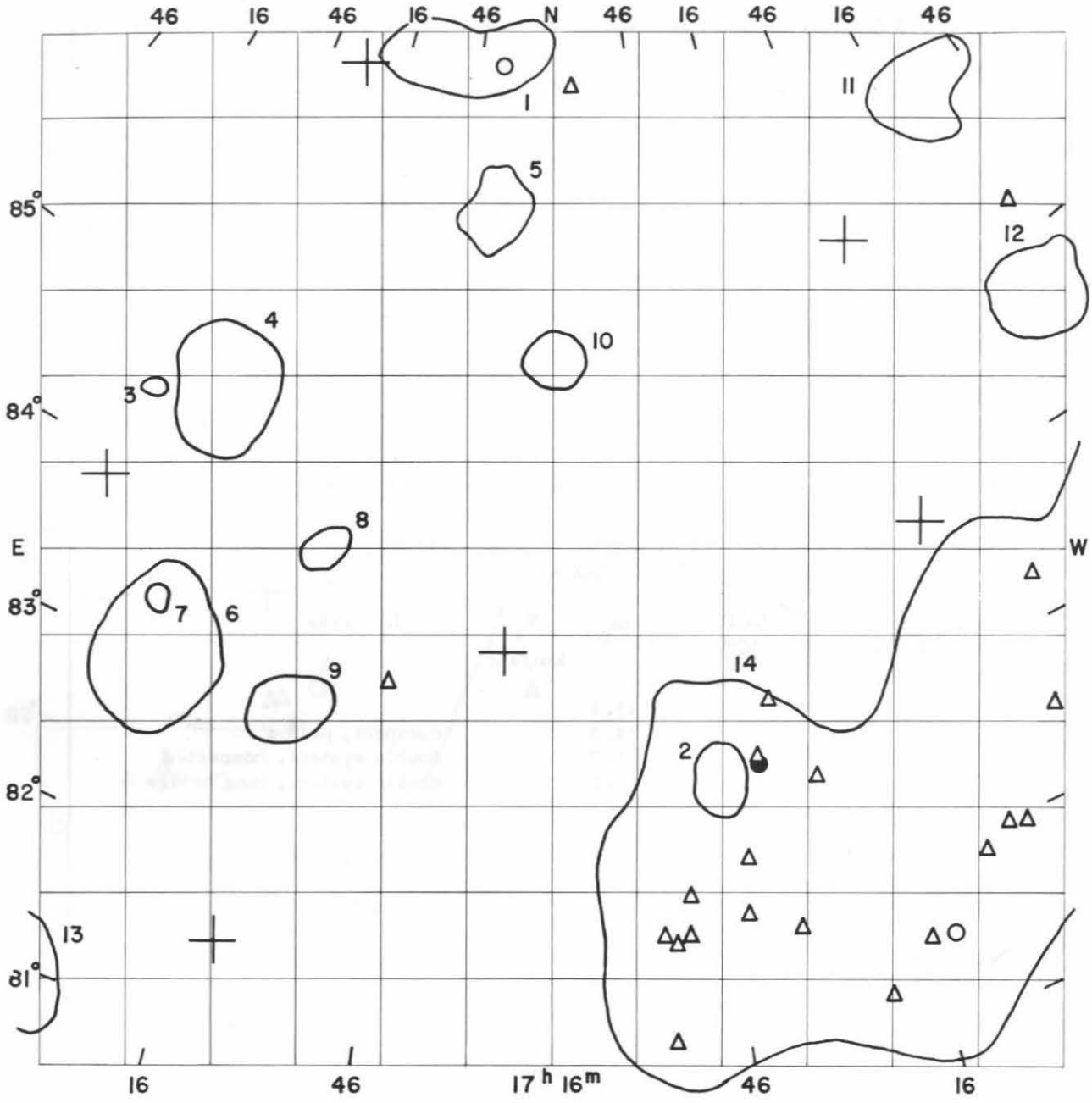
CLUSTERS OF GALAXIES

Cluster	Character	Population	Diameter in cm	Distance	Number on chart
1315.0 + 8206	open	110	3.3	D	9
1315.0 + 8540	medium compact	69	3.0	D	8
1339.0 + 8035	open	121	6.8	MD	10
1358.0 + 8421	medium compact	80	3.2	MD	7
1359.0 + 8323	medium compact	118	3.7	D	11
1428.0 + 8334	medium compact	70	1.7	VD	5
1435.0 + 8028	medium compact	57	1.1	VD	6
1505.0 + 8601	open	64	3.1	VD	2
1507.0 + 8440	open	84	3.1	VD	3
1609.0 + 8212	medium compact	260	17.5	Near	4
1715.0 + 8507	compact	55	1.9	VD	1

Average number of galaxies per cluster = 98.9

GALAXIES

Position α 1950 δ h m o '	NGC IC*	m_p	V_s km/sec	Remarks
12 57 + 84 23		15.4		
13 09 + 84 53		14.5		compact, plume
13 19 + 84 46		15.7		double system, connected
13 25 + 84 47		15.6		double system, long bridge
13 41 + 80 57		15.7		
13 43 + 83 45		15.5		
13 44 + 80 51		15.4		double system
14 21 + 83 39		15.6		
14 29 + 83 31		15.3		compact
14 55 + 82 45		15.4		
14 58 + 83 48		14.1		
15 00 + 83 44		13.8		
15 00 + 85 13		15.7		
15 02 + 81 37		14.8		
15 18 + 82 08		15.6		double system, bridge + jet
15 29 + 83 15		15.2		
15 34 + 82 46	1139*	15.6		
15 35 + 82 38	1143*	14.7		
15 37 + 82 25		15.2		
15 38 + 83 15		15.6		
15 41 + 82 32		15.7		extremely diffuse
15 43 + 82 30		15.7		extremely diffuse spiral
15 48 + 81 59		14.9		spiral + faint outer loop
15 55 + 81 55		15.3		
15 56 + 80 15		15.7		very compact
15 58 + 81 58		15.5		
16 03 + 81 50		15.3		
16 04 + 80 22		15.7		compact
16 11 + 81 26		15.0		
16 34 + 83 00		15.5		double system, connected



FIELD No. 367

17^h16^m $+84^o00'$

Survey Plate No. 775

GC STARS

Nos.	R.A.	Decl.	m_p
	h m s	o ' "	
21282	15 47 50.0	+ 85 26 31	7.05
21417	15 54 41.0	+ 83 46 03	7.06
23669	17 25 42.9	+ 83 22 51	7.46
24837	18 10 11.5	+ 81 28 33	7.67
25364	18 31 48.3	+ 86 37 43	6.82
26071	18 56 40.1	+ 83 50 30	6.81

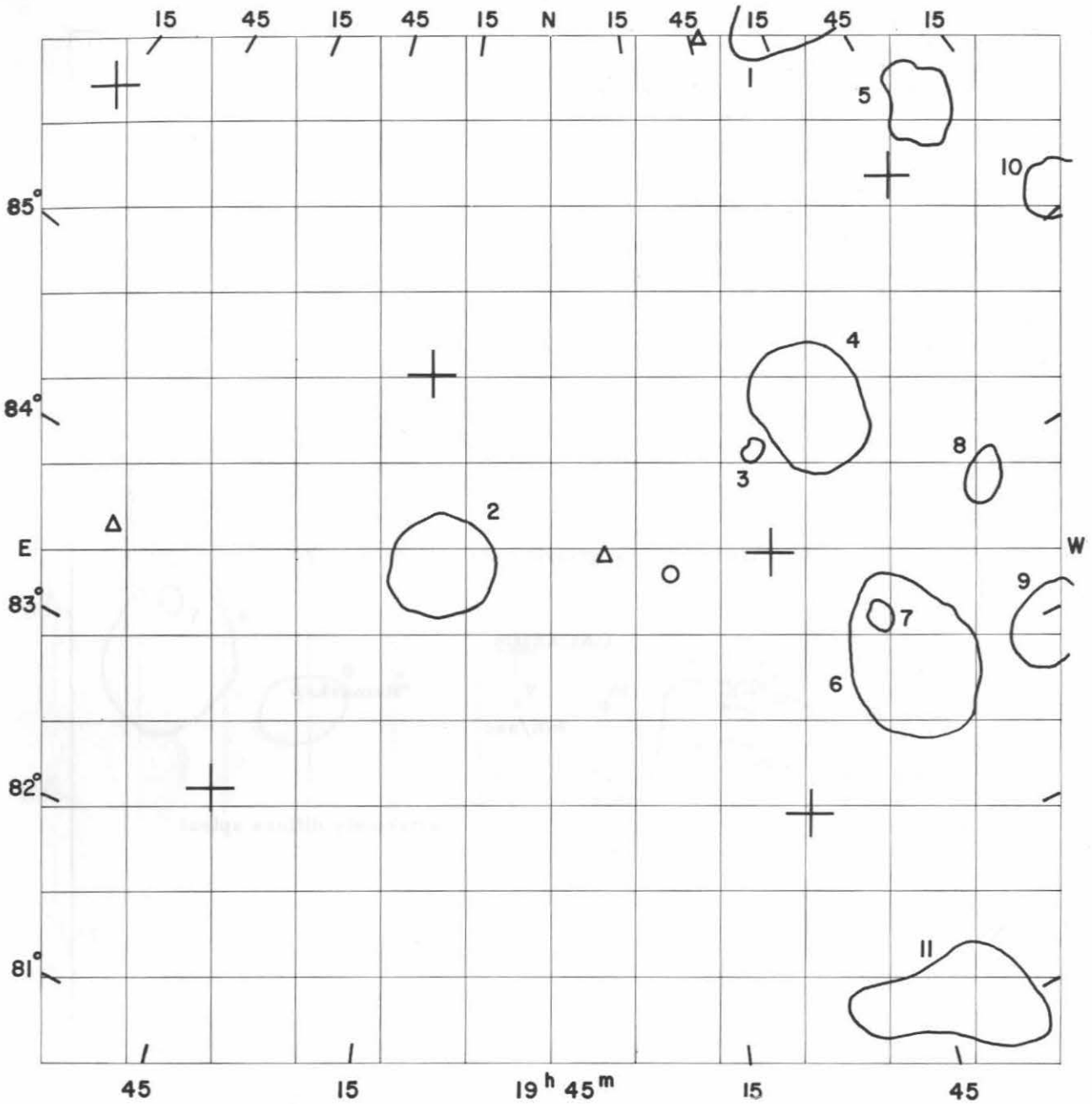
CLUSTERS OF GALAXIES

Cluster	Character	Population	Diameter in cm	Distance	Number on chart
1505.0 + 8601	open	64	3.1	VD	11
1507.0 + 8440	open	84	3.1	VD	12
1609.0 + 8212	medium compact	260	17.5	Near	14
1646.0 + 8236	medium compact	74	2.0	ED	2
1715.0 + 8507	compact	55	1.9	VD	10
1734.0 + 8557	compact	56	2.2	VD	5
1753.0 + 8648	medium compact	126	3.5	D	1
1806.0 + 8351	compact	52	1.4	ED	8
1807.0 + 8254	medium compact	106	2.5	VD	9
1834.0 + 8259	compact	110	4.6	D	6
1837.0 + 8319	compact	42	0.8	ED	7
1839.0 + 8436	open	88	3.8	VD	4
1842.0 + 8104	open	128	4.1	D	13
1855.0 + 8426	compact	32	0.6	ED	3

Average number of galaxies per cluster = 91.2

GALAXIES

Position α 1950 δ h m o '	NGC IC*	m_p	V_s km/sec	Remarks
15 00 + 85 13		15.7		
15 38 + 83 15		15.6		
15 43 + 82 30		15.7		extremely diffuse spiral
15 55 + 81 55		15.3		
15 58 + 81 58		15.5		
16 03 + 81 50		15.3		
16 11 + 81 26		15.0		
16 15 + 81 26		15.4		
16 23 + 81 10		15.5		
16 28 + 82 31		15.7		diffuse spiral
16 34 + 83 00		15.5		double system, connected
16 35 + 81 40		15.2		double system, faint bridge
16 38 + 82 39	6251	14.0		
16 38 + 82 42	6252	15.1		
16 42 + 82 07		15.1		
16 44 + 81 47		15.6		
16 53 + 81 56		15.7		
16 54 + 81 42		15.6		very compact
16 56 + 81 40		15.5		triple system
16 57 + 81 05		15.6		
16 58 + 81 44		15.4		
17 09 + 86 40		15.2		
17 36 + 86 47		14.3		interacting double system
17 48 + 83 09		15.3		extremely compact



FIELD No. 368

19^h45^m $+84^o00'$

Survey Plate No. 802

GC STARS

Nos.	R.A.	Decl.	m_p
	h m s	o ' "	
24421	17 54 58.4	+ 85 41 01	7.50
26071	18 56 40.1	+ 83 50 30	6.81
26155	18 59 20.9	+ 82 18 06	6.83
28249	20 16 50.0	+ 84 58 21	7.11
29019	20 46 20.0	+ 82 20 52	5.69
31223	22 17 33.7	+ 85 51 27	5.38

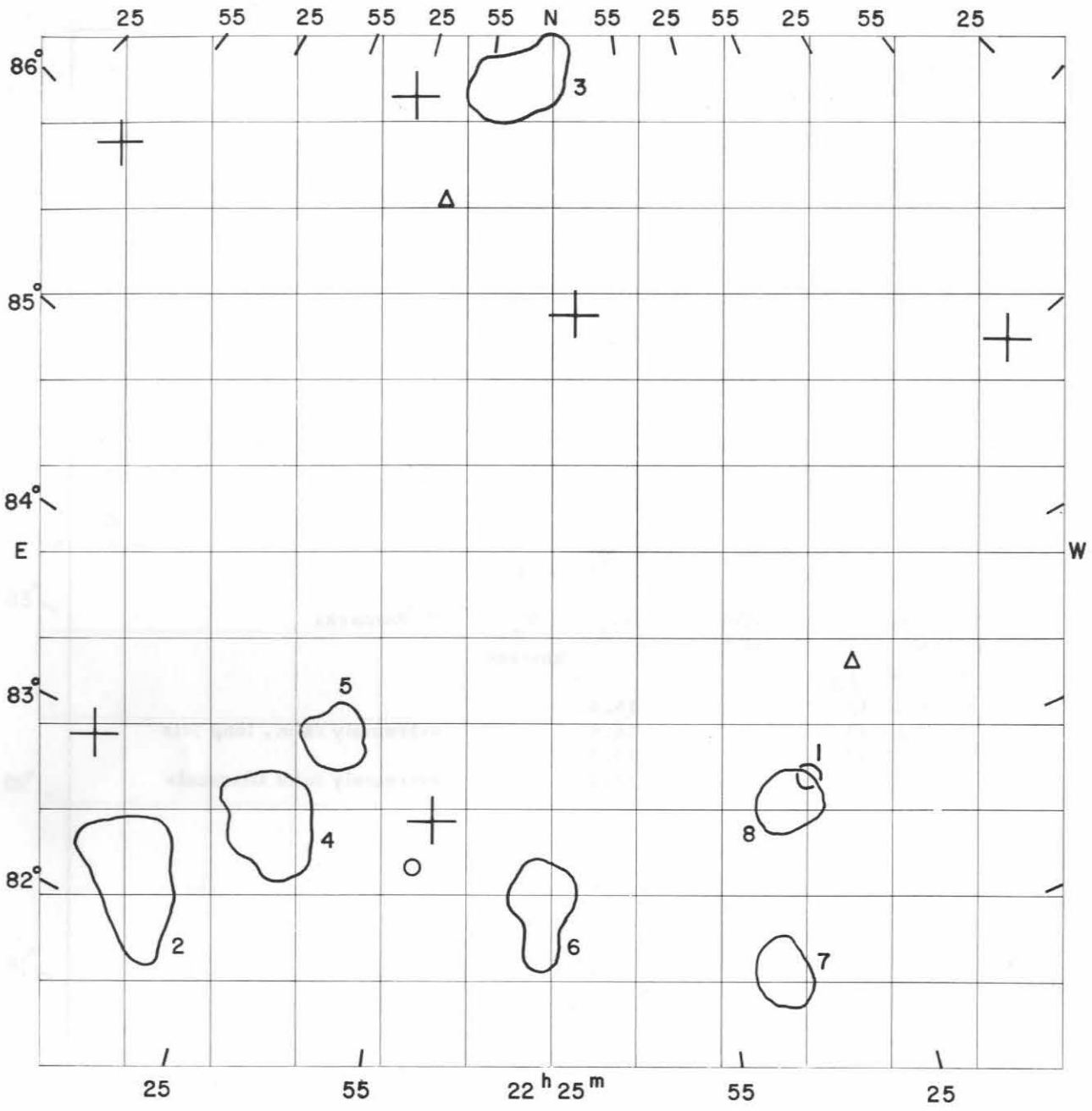
CLUSTERS OF GALAXIES

Cluster	Character	Population	Diameter in cm	Distance	Number on chart
1715.0 + 8507	compact	55	1.9	VD	10
1734.0 + 8557	compact	56	2.2	VD	5
1753.0 + 8648	medium compact	126	3.5	D	1
1806.0 + 8351	compact	52	1.4	ED	8
1807.0 + 8254	medium compact	106	2.5	VD	9
1834.0 + 8259	compact	110	4.6	D	6
1837.0 + 8319	compact	42	0.8	ED	7
1839.0 + 8436	open	88	3.8	VD	4
1842.0 + 8104	open	128	4.1	D	11
1855.0 + 8426	compact	32	0.6	ED	3
2009.0 + 8351	medium compact	90	3.3	D	2

Average number of galaxies per cluster = 80.5

GALAXIES

Position α 1950 δ h m o '	NGC IC*	m_p	V_s km/sec	Remarks
18 41 +86 52		15.4		
19 19 +83 49		14.8		extremely faint, long jets
19 33 +83 57		15.5		
21 21 +83 37		15.2		extremely faint filaments



FIELD No. 369

22^h25^m $+84^\circ30'$

Survey Plate No. 1216

GC STARS

Nos.	R.A.	Decl.	m_p
	h m s	o ' "	
28249	20 16 50.0	+ 84 58 21	7.11
31223	22 17 33.7	+ 85 51 27	5.38
31855	22 47 44.2	+ 82 53 19	4.97
32680	23 27 34.2	+ 87 01 54	5.62
33205	23 54 04.0	+ 82 54 46	Var.
1288	1 01 30.8	+ 85 59 24	4.52

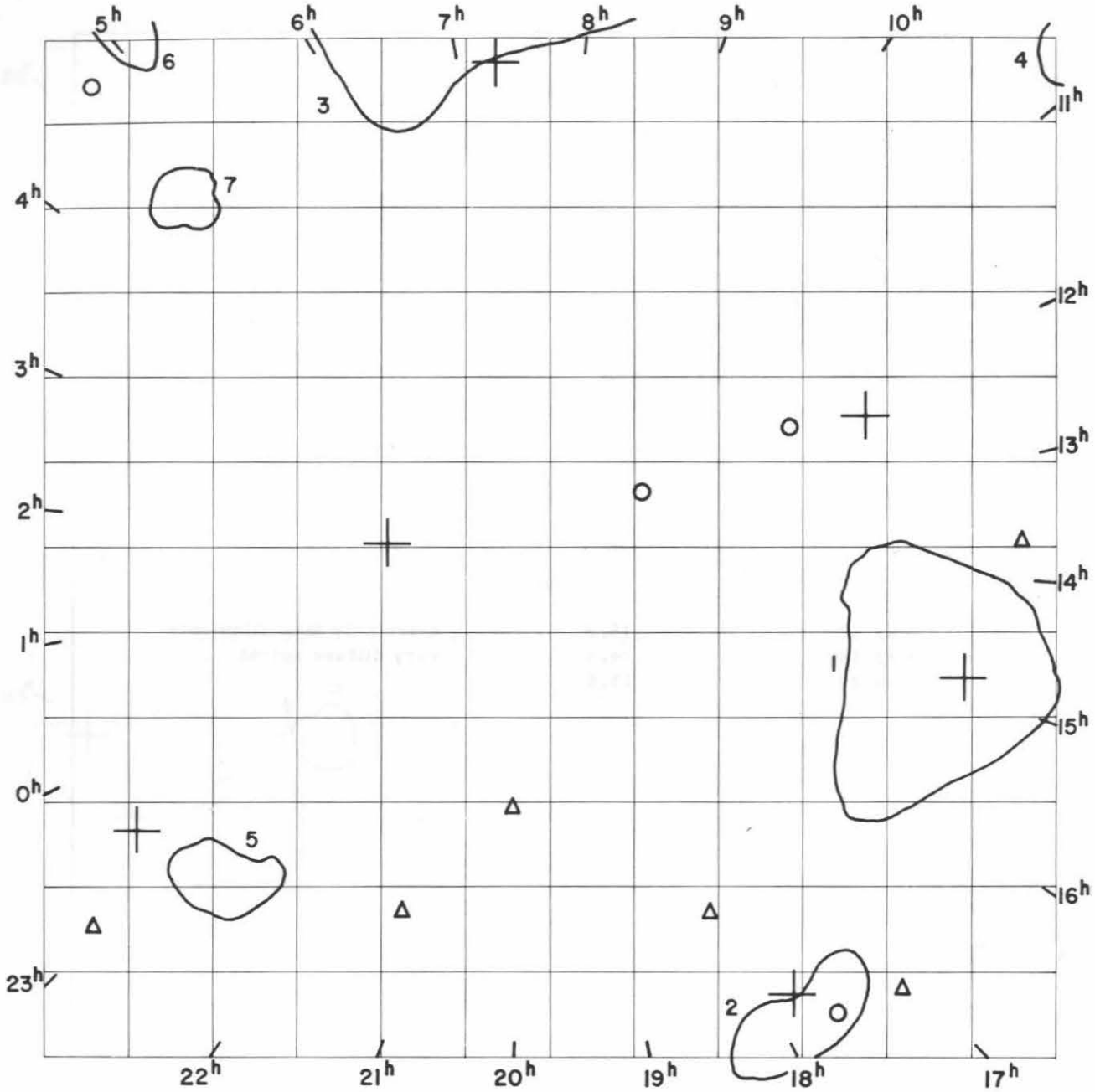
CLUSTERS OF GALAXIES

Cluster	Character	Population	Diameter in cm	Distance	Number on chart
2135.0 + 8302	compact	41	0.7	ED	1
2140.0 + 8255	compact	83	2.0	VD	8
2147.0 + 8155	compact	56	2.0	ED	7
2227.0 + 8225	medium compact	68	2.5	VD	6
2243.0 + 8713	medium compact	94	2.7	MD	3
2309.0 + 8317	compact	59	2.0	ED	5
2318.0 + 8243	medium compact	70	3.1	D	4
2339.0 + 8209	medium compact	96	3.5	MD	2

Average number of galaxies per cluster = 70.9

GALAXIES

Position α 1950 δ h m o '	NGC IC*	m_p	V_s km/sec	Remarks
21 21 +83 37		15.2		extremely faint filaments
22 50 +82 38		14.9		very diffuse spiral
23 06 +86 29		15.6		



FIELD No. 370A

19^h43^m $+90^\circ00'$

Survey Plate No. 570

GC STARS

Nos.	R.A.	Decl.	m_p
	h m s	o ' "	
2243	1 48 48.5	+ 89 01 44	2.12
9772	7 17 50.4	+ 87 07 35	5.26
16763	12 14 44.8	+ 87 58 37	6.28
20088	14 53 35.2	+ 87 25 20	7.16
24266	17 49 12.1	+ 86 59 32	5.86
32680	23 27 34.2	+ 87 01 54	5.62

CLUSTERS OF GALAXIES

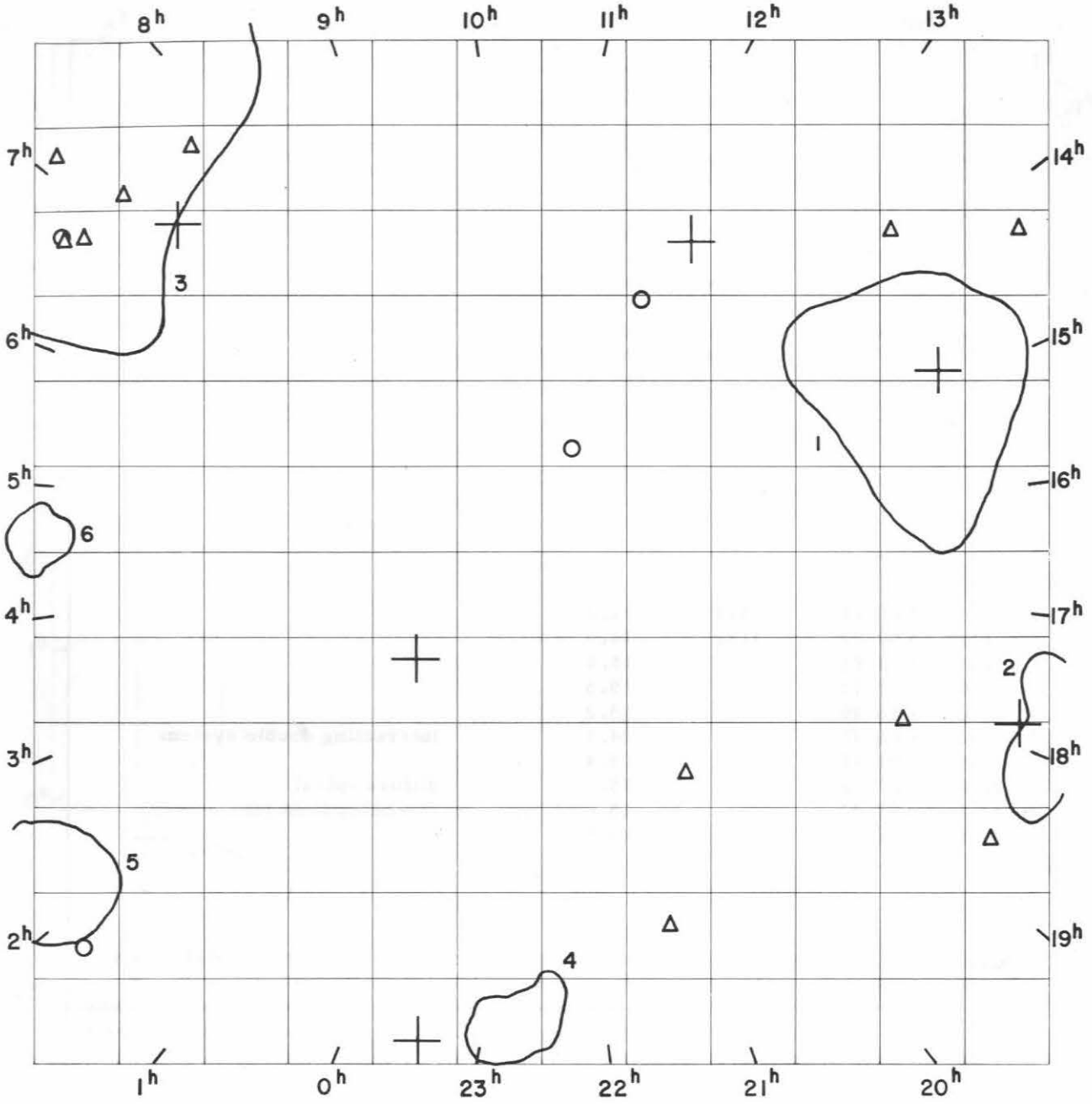
Cluster	Character	Population	Diameter in cm	Distance	Number on chart
0435.0 + 8701	open	67	2.1	VD	7
0506.0 + 8558	medium compact	97	2.4	VD	6
0735.0 + 8545	open	216	16.9	Near	3
1050.0 + 8542	medium compact	81	2.5	VD	4
1501.0 + 8734	open	156	7.6	MD	1
1753.0 + 8648	medium compact	126	3.5	D	2
2243.0 + 8713	medium compact	94	2.7	MD	5

Average number of galaxies per cluster = 119.6

GALAXIES

Position α 1950 δ	NGC IC*	m_p	V_s km/sec	Remarks
h m o '				
4 44 +86 09	1544	14.2		
11 38 +89 22	3172	14.9		
11 58 +88 24		15.0		
13 41 +87 13		15.5		
17 09 +86 40		15.2		
17 36 +86 47		14.3		interacting double system
18 09 +87 40		15.4		
20 18 +88 28		15.7		diffuse spiral
21 14 +87 42		15.6		compact, faint jet
23 06 +86 29		15.6		

Three small quadrangles near the edges of the polar fields are not included in any of the fields of the + 84° zone either. They are located near declination + 86°35' at right ascensions 9^h, 12^h, 15^h respectively. Neither of them is in excess of about 1/4 square degree and there are no galaxies or clusters of galaxies found there which would deserve inclusion in this catalogue.



FIELD No. 370B

22^h31^m $+90^\circ00'$

Survey Plate No. 567

GC STARS

Nos.	R.A.	Decl.	m_p
	h m s	o ' "	
2243	1 48 48.5	+ 89 01 44	2.12
9772	7 17 50.4	+ 87 07 35	5.26
16763	12 14 44.8	+ 87 58 37	6.28
20088	14 53 35.2	+ 87 25 20	7.16
24266	17 49 12.1	+ 86 59 32	5.86
32680	23 27 34.2	+ 87 01 54	5.62

CLUSTERS OF GALAXIES

Cluster	Character	Population	Diameter in cm	Distance	Number on chart
0215.0 + 8630	medium compact	100	4.0	MD	5
0435.0 + 8701	open	67	2.1	VD	6
0735.0 + 8545	open	216	16.9	Near	3
1501.0 + 8734	open	156	7.6	MD	1
1753.0 + 8648	medium compact	126	3.5	D	2
2243.0 + 8713	medium compact	94	2.7	MD	4

Average number of galaxies per cluster = 126.5

GALAXIES

Position α 1950 δ		NGC IC*	m_p	V_s km/sec	Remarks
h m	o ′				
1 47	+ 86 27		14.5		
6 42	+ 86 40		15.6		
6 43	+ 86 38		14.8		
6 48	+ 86 45		15.3		
7 07	+ 86 19		15.5		
7 13	+ 86 47		15.2		
7 47	+ 86 52		15.7		diffuse
11 38	+ 89 22	3172	14.9		
11 58	+ 88 24		15.0		
13 41	+ 87 13		15.5		
14 15	+ 86 37		15.7		
18 09	+ 87 40		15.4		
18 41	+ 86 52		15.4		
20 18	+ 88 28		15.7		diffuse spiral
21 14	+ 87 42		15.6		compact, faint jet

See footnote for Field No. 370A.

ERRORS AND OMISSIONS

IN VOLUME I

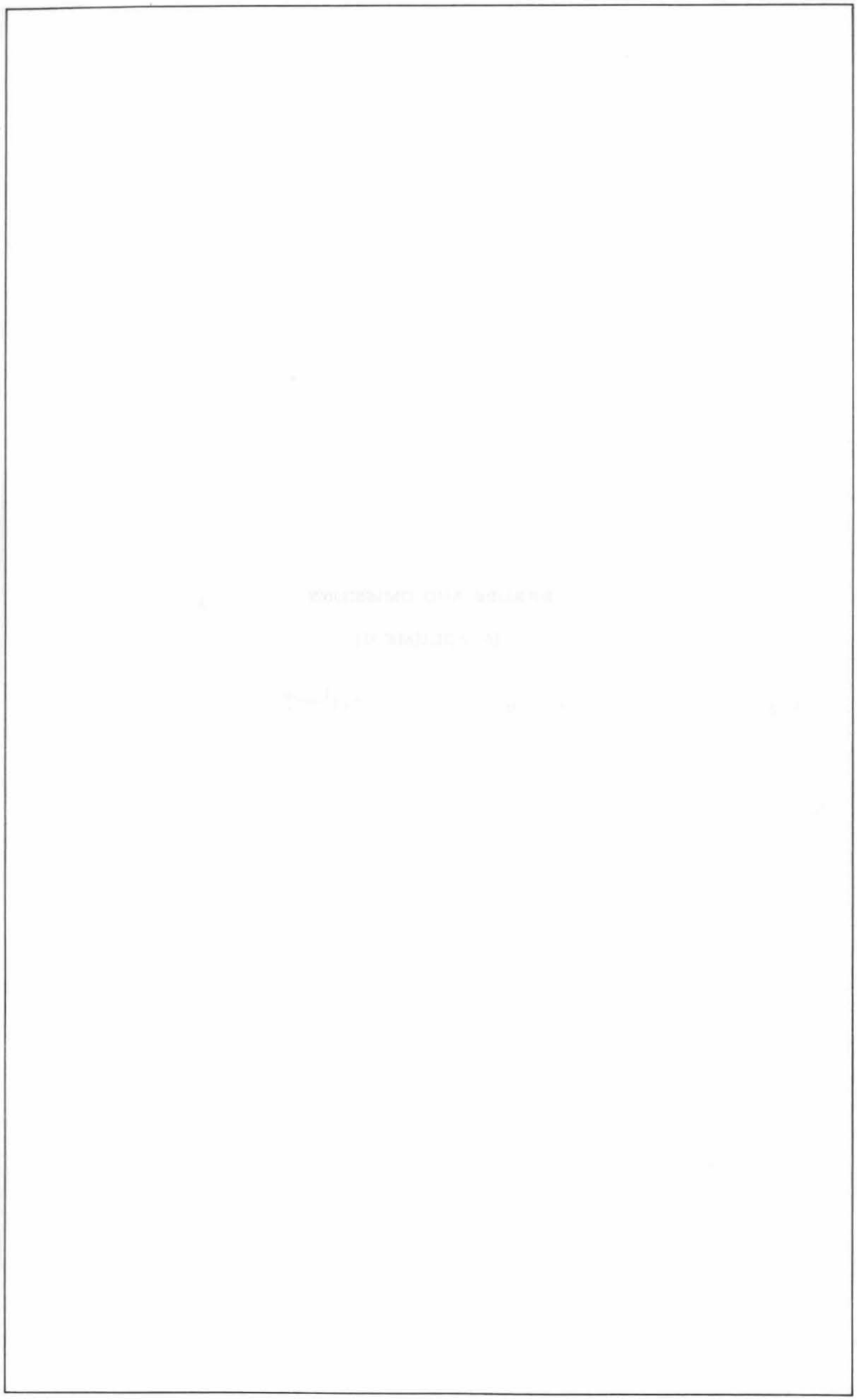
Page 46: For galaxy $11^h56^m.7 - 03^o23'$ change α to read " $11^h58^m.7$ " .

ERRORS AND OMISSIONS

IN VOLUME III

Page 332: For NGC 3499 change α to read "$11^h00^m.2$ " .

Page 391: On line 11 change the name Dreyev to read "Dreyer" .



GRAPHS FOR THE DETERMINATION OF PRECESSIONS

To facilitate the determination of precessions two graphs are provided. They depict the centennial precessions, according to Newcomb, for the equinox 2000.0

$$p_\alpha = m + n \sin \alpha \operatorname{tg} \delta \,, \quad p_\delta = n \cos \alpha$$

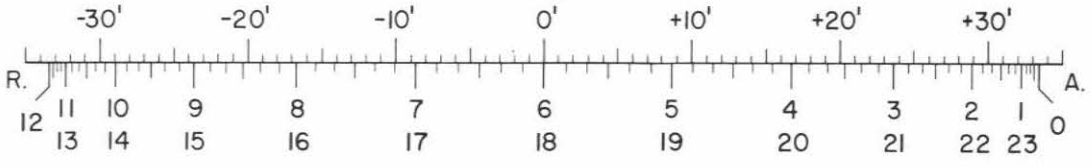
with the numerical values

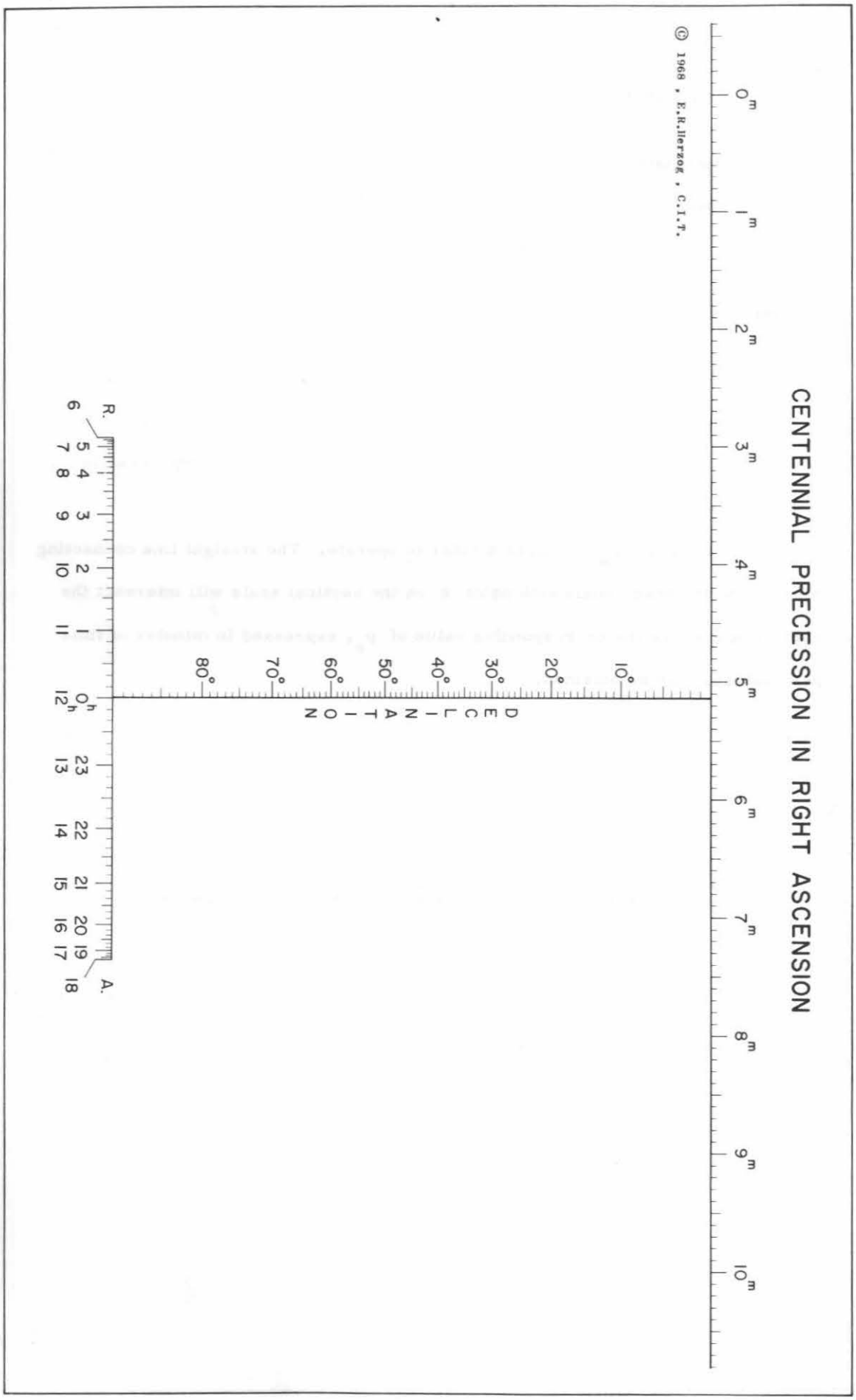
$$m = 5^m.12367 \,, \quad n = 2^m.22648 = 33'.3972$$

The graph for p_δ confronts the values of α on the lower scale with the corresponding values of p_δ on the upper scale, the latter being expressed in minutes of arc per century.

The graph for p_α requires a ruler to operate. The straight line connecting point α on the lower scale with point δ on the vertical scale will intersect the upper scale where the corresponding value of p_α, expressed in minutes of time per century, may be obtained.

CENTENNIAL PRECESSION IN DECLINATION




CENTENNIAL PRECESSION IN RIGHT ASCENSION
© 1968 , E.R.Herzog , C.I.T.
0m
1m
2m
3m
4m
5m
6m
7m
8m
9m
10m
10°
20°
30°
40°
50°
60°
70°
80°
DECLINATION
R.
A.
0h
12
23
13
22
14
21
15
20
16
19
17
18
1
11
2
10
3
9
4
8
5
7
6